AUTHOR INDEX

VOLUME 64

Abad, F. Xavier, 2392 Abarca, Carolina, 4965 Abe, Fumiyoshi, 1139 Abe, Keietsu, 2513 Abee, Tjakko, 439, 1059, 3917 Abraham, Wolf-Rainer, 4202 Abreu-Grobois, F. Alberto, 2318 Abriouel, H., 4623 Abu Al-Soud, Waleed, 3748 Abu Kwaik, Yousef, 126, 3127, 3134 Accashian, John V., 3300 Achouak, Wafa, 2937 Adachi, Kiichi, 3983 Adachi, Kyoko, 3641 Adams, C. A., 4194 Adams, L. Garry, 3099 Adams, M. R., 459 Adang, Michael J., 2995 Adorada, Dante L., 2463 Adrian, Lorenz, 496 Aebi, M., 4260 Affolter, Michael, 4809 Afshar, Sepideh, 3004 Aguilar, O. Mario, 3520 Ahlgren, Jeffrey A., 2147 Ahmad, Zainori, 1153 Ahmadi, Ali-Reza, 3977 Ahring, Birgitte K., 1860 Akhtar, Masood, 3536 Akimov, Vladimir, 4313 Akkerman, Simon B., 1447 Akkermans, Antoon D. L., 871, 3854, 4546, 4581, 4588 Akutsu, Katsumi, 3983 Akutsu, Yukie, 62 Alatossava, Tapani, 4816 Aldsworth, Timothy G., 1323 Aleksic, Stojanka, 2449, 4134 Alexander, Nancy J., 221 Alfreider, Albin, 4299 Alic, Margaret, 569 Allen, Caitilyn, 4918 Allison, Robert W., 1759 Allsopp, M. H., 1983 Alm, Glen, 133 Almeida, Paulo F., 779 Alpert, Carl-Alfred, 2013 Alvarez, Raul, 4378 Alvarez-Cohen, Lisa, 3451 Alvey, Sam, 178 Amann, Rudolf, 930, 1895, 2691, 3480, 4299, 4973 Amaral, J. A., 520 Amaral, John A., 2397 Amaral, Sheila C., 564 Amellal, N., 3740 Amie, Junya, 2061 Ampe, Frédéric, 1 Ampleman, G., 2200 An, G.-H., 1947 Anbe, Yuki, 3754 Andersen, Jens Bo, 721, 2240, 2247 Anderson, John G., 2065, 4643 Anderson, W. A., 459 Anderssen, Erlend L., 2269 Andersson, M. A., 1338, 4767 Andersson, M. C., 1338 Andrade, G., 2304

Andreu, Manuel J., 4269 Anguish, Lynne J., 4439 Anke, Timm, 1601 Aono, Rikizo, 1929 Aouad, Saleh, 2831 Apajalahti, Juha, 2079 Apajalahti, Juha H. A., 4084 Aparecida Hebling, Maria José, 4820 Apostol, Izydor, 1589 Appeldoorn, K. J., 2925 Applegate, B. M., 2730 Applegate, Bruce M., 5049 Ara, Katsutoshi, 3282 Arai, Motoo, 4857 Arias, Covadonga R., 3403 Arimoto, Mitsue, 4021 Arnal, Charlotte, 3118 Arnaud, Alain, 2844 Arneborg, Nils, 530 Arnold, R. G., 2572 Arnold, Robert G., 1115 Arp, Daniel J., 1372, 1514, Arthur, Ray R., 363 Artz, Rebekka R. E., 2894 Arvin, Erik, 1860 Asai, Norio, 1153 Ásgeirsdóttir, Sigridur A., 4028 Ashburn, Rebecca J., 279 Ashburne-Lucas, Amy, 4276 Asmundson, R. V., 2111 Atasoglu, Cengiz, 2836 Attfield, P. V., 1669 Attieh, Jihad, 2831 Attwood, Graeme T., 1796 Attwood, G. T., 907 Atwill, Edward R., 1584 Aubert, Corinne, 1308 Audic, Jean-Marc, 2266 Audic, J. M., 4307 Auffray, Yanick, 4238 Austin, B., 4194 Averhoff, Beate, 2454 Avguštin, Gorazd, 3683 Ayoubi, Patricia J., 4353 Azaïez, Sandra R. Chibani, 4255 Azcon-Aguilar, C., 2304 Azizbekyan, Roudolf R., 2723 Aznar, Rosa, 3403

Bååth, Erland, 238 Babenzien, Hans-Dietrich, 1890, 1895 Bacci, Maurício, Jr., 4820 Bachand, George D., 1430, 1436 Bachofen, Reinhard, 1237 Bacic, Melissa K., 106 Bacic, M. K., 1484 Backhaus, Horst, 2814 Bagwell, Christopher E., 4276 Bailey, Mark, 1319 Bailey, Mark J., 2634 Bakken, Lars, 1143 Balebona, M. Carmen, 1573, 4269 Baljer, Georg, 4234 Ball, Hywel J., 3153 Ball, Olivier J.-P., 601

Bambirra, Eduardo A., 564 Bandell, M., 1594 Banton, Kaysie L., 2463 Barak, Yoram, 813 Barak, Ze'Ev, 1750 Barbieri, Andrea S., 1967 Barbieri, Paola, 3023, 3626 Bárcena, J. M. Bruno, 3512 Barea, J. M., 2304 Barlough, Jeffrey E., 2888 Barnes, Stephen, 2335 Barnett, P., 3515 Baron, Michel, 3202 Barrasa, J. M., 325 Barre, Pierre, 3607, 3831 Barriault, Diane, 4637 Bartha, R., 1013, 1987, 4924 Bartholomay, Christian T., 4994 Bartlett, K. J., 1390 Bartoli, F., 3740 Bååth, Erland, 2173 Batt, Carl A., 4720 Bauer, Leah S., 3932, 4368 Bauer, Wolfgang D., 1708 Baygents, J. C., 2572 Bayley, Susan A., 1871 Beatty, J. Thomas, 337 Beaudet, R., 4603 Beaudette, Lee A., 2020 Beaulieu, Carole, 4313 Bech, Lisbeth, 1601 Beckmann, Christiane, 5000 Bedard, Donna L., 940, 1786 Beijersbergen, A., 2794 Beisker, Wolfgang, 4973 Bell, Michael V., 370 Bell, P. J. L., 1669 Belongia, B. M., 2572 Ben-Dov, Eitan, 1750 Ben-Israel, Haggit, 4346 Ben-Israel, Oren, 4346 Bennasar, A., 3014 Benno, Yoshimi, 2982 Benson, Andrew K., 3147 Benson, David R., 3539 Benson, Robert F., 1688 Benstead, J., 1091 Benz, Marcus, 4507 Berardesco, Gina, 2560 Berendes, Frank, 2454 Bergbauer, M., 2788 Berger, R. D., 3961 Bergeron, Hélène, 4363 Bergman, Birgitta, 3052 Bergquist, Peter L., 1759 Bergström, Maria, 2670 Berk, Sharon G., 279 Berka, Randy M., 4423 Bermejo, Lourdes L., 1079 Bernard, Théophile, 1420 Berthelin, Jacques, 2937 Bertoni, Giovanni, 3626 Bertrand, Jean-Claude, 1576 Besse, P., 153, 159 Bettenbrock, Katja, 2013 Bezoen, Alja, 1412 Bhaduri, Saumya, 1812 Bhatnagar, D., 3713 Bhatnagar, Deepak, 4834 Bhunia, Arun K., 3070

Biagini, Giancarlo A., 203 Bialkowska-Hobrzanska, Hanna, 2418 Bianciotto, V., 2304 Bianco, Pierre, 1308 Bidnenko, Elena, 3059 Biel, Stefan S., 4128 Bienkowski, Paul R., 5049 Bierbaum, Gabriele, 3140 Bigey, Frederic, 2844 Billaudel, Sylviane, 3118 Billi, Daniela, 4053 Binder, Brian J., 3346 Birkness, Kristin, 2256 Bisaillon, J.-G., 4603 Bissett, John, 133 Bissinger, P. H., 1669 Bitsch, Francis, 714 Björkroth, Johanna, 703, 4161 Björkroth, K. J., 3313 Bjørn, Sara Petersen, 2240 Bjørnsen, Peter Koefoed, 3246 Black, William D., 366 Blackall, Linda L., 1878 Blackburn, Michael, 3036 Blackburn, Nicholas, 3246 Blakeslee, K., 618 Blakis, A., 2585 Blakis, Andrew, 258 Blanch, Kathryn, 3166 Blanco, Carlos, 1420 Block, J. C., 197 Block, Jean-Claude, 2266 Blodgett, R. J., 1459 Blümel, Silke, 2315 Blunt-Harris, Elizabeth L., 1504 Boccia, Theresa M., 4663 Boch, Jens, 3180 Bock, Eberhard, 4530 Bockemühl, Jochen, 2449 Bodelle, P., 793 Boels, I. C., 1333 Boemare, Noël, 2367, 4246 Boer, F., 1333 Boerlin, Patrick, 4134 Boersma, Marelle G., 1256 Böger, Peter, 1972 Bogosian, Gregg, 1736 Bohra, L. K., 3389 Bok, Jin-Duck, 4774 Bolhuis, Albert, 4736 Bolton, Harvey, Jr., 669 Bond, Daniel R., 976 Bonfante, P., 2304 Bonilla, Ildefonso, 1024 Bonnin, Alain, 1454 Boonstra, J., 316 Boot, Johan, 4736 Bor, Yeou-Cherng, 4720 Bordas, M. Angeles, 1573, 4269 Borkott, Heinz, 2660 Borneman, James, 5020 Borrego, Juan J., 1573, 4269 Bortiatynski, Jacqueline M., 1447 Bosch, Albert, 2392 Bostock, R. M., 3818 Bosworth, Brad T., 1975 Bothast, Rodney J., 216 Bottomley, Peter J., 970, 1372

Boucabeille, Catherine, 3416

Bourbonnière, Luc, 2578

Bové, Joseph-Marie, 4566

Bouzar, H., 3961

Boven, Steven, 3220

Bowen, David J., 3029, 3036 Bowie, William R., 2278 Bowman, Dwight D., 784 Bowman, John P., 2806 Boyd, G., 4533 Bradley, Paul M., 1560, 3102 Brainard, Adam P., 1852 Braker, Gesche, 3769 Brakhage, Axel A., 843 Brand, Bettina C., 2686 Brandão, Rogelio L., 564 Brandl, Helmut, 1237 Brandl, M. T., 3256 Bratina, Bonnie Jo, 3791 Bravo, Alejandra, 4965 Breen, Alec, 2755 Breeuwer, Pieter, 439 Brehm, John K., 1612 Breidt, Frederick, 3159 Breuer-Jammali, Maren, 359 Breznak, John A., 43, 1919 Bridge, Toni A. M., 2181 Brigmon, Robin L., 3491 Brignon, Pierre, 1157 Brinkhoff, T., 4057 Brinkhoff, Thorsten, 4128, 4650 Britz, H., 2094 Broadaway, Susan C., 4658 Broadbent, Jeffery R., 2147 Broadwell, Andrew H., 4060 Brocks, Bodo, 4862 Brombacher, Christoph, 1237 Brooke, Cheryl L., 4390 Brousseau, Roland, 4782 Brouwers, G. J., 3556 Brown, Averil E., 5053 Brown, D. W. G., 858 Brown, Kimberly M., 4423 Brözel, V., 1983 Bruce, Neil C., 2864, 4106 Brul, S., 4047 Brümmer, I., 3014 Brune, Andreas, 4507 Brunel, Brigitte, 4246 Brunk, Clifford F., 5064 Bruns, Mary-Ann V., 2958 Brurberg, May Bente, 3275 Bruschi, Carlo V., 789 Bruschi, Mireille, 1308 Brush, Charles F., 4439 Bryant, Donald A., 2361 Bryant, Juliet C., 2281 Buchanan, R. L., 4533 Bucher, Doris J., 4663 Buchholz-Cleven, Berit E. E., Buckley, Daniel H., 4333 Bugg, Timothy D. H., 4093 Buisson, Jean Christophe, 1454 Bukhari, Z., 4495 Bulla, Lee A., Jr., 2158 Bungartz, Hans-Joachim, 4115 Burchard, Robert P., 4079 Burd, Genrich I., 3663 Burdon, Jeremy J., 3989 Burke, Patricia V., 1040 Burkhardt, William, III, 5027 Burnes, Brian S., 2716

Burrell, Paul C., 1878 Burris, David R., 1270 Burtin, G., 3740 Busalmen, J. P., 3690 Busch, Kathryn, 1246 Buswell, Clive M., 733 Button, D. K., 3900, 4467 Buyong, Nurliza, 4842 Büyüksönmez, Fatih, 3759 Byun, Tony, 4423

Caballero, Primitivo, 4372 Cabrera, Lilia, 2284 Cai, Yimin, 2982 Caiola, Maria Grilli, 4053 Calci, Kevin R., 5027 Calhoun, A., 1099 Callac, Philippe, 2105 Cameron, Douglas C., 98 Cammack, Richard, 3195 Campbell, Colin D., 238 Cánovas, David, 4095 Caracuel, Zaira, 1967 Cardoso, Helena, 665 Carlson, Russell, 3939 Caro, L. H. P., 4047 Carpenter, Edward J., 3052 Carpenter-Boggs, Lynne, 4062 Carrascosa, Alfonso V., 2187 Carú, Margarita, 3539 Cary, Jeffrey W., 4834 Casal, Margarida, 665 Casaus, Pilar, 4536 Casey, Thomas A., 1975 Caspi, Ron, 3549 Castella, G., 3084 Castello, John D., 1430, 1436 Castenholz, Richard W., 3893 Castillejo, Juan I., 4372 Castle, Alan, 133 Castro, Ieso M., 564 Catala, P., 2697 Catala, Philippe, 1725 Cathcart, Declan P., 1871 Caufield, Page W., 2335 Cavaco, Miguel, 779 Cavanaugh, Colleen M., 1715, Cavicchioli, Ricardo, 4433 Cavin, Jean-François, 1466 Cerniglia, Carl E., 2473, 3106 Cervone, Felice, 1497 Chaillou, Stéphane, 4720 Chakrabarty, A. M., 2086 Champagne, Claude P., 192 Champliaud, Dominique, 1454 Chan, Amy M., 346 Chandler, Darrell P., 669 Chang, Ho Nam, 2327 Chang, Je Hwan, 2327 Chang, Michelle C., 2822 Chang, Perng-Kuang, 4834 Chang, Shenq-Chyi, 5012 Chang, Yong Keun, 2327 Chapelle, Francis H., 3102 Chapman, B., 1669 Chapman, Peter J., 1447 Chapot-Chartier, Marie-Pierre, 4142 Chappell, Cynthia L., 4477 Chase, A. R., 3961

Chataud, J., 800

Chauhan, Sadhana, 3023

Chauvet, Eric, 1522 Chefetz, Benny, 3175 Chelkowski, J., 3084 Chen, Chih-Cheng, 4217 Chen, Fan, 4073 Chen, Jinru, 147 Chen, Jui-Lin, 4452 Chen, Liangjing, 2609 Chen, Ping, 2335 Chen, Shu, 4210 Chen, Yanling, 14 Chen, Yona, 3175 Chen, Yo-Shen, 3411 Chen, Yuhuan, 3530 Chen, Zhengdao, 1852 Cheng, Yi-Qiang, 1497 Chilcott, Chris N., 4060 Chin, Charles W. J., 1759 Chin-Joe, I., 1333 Chirtel, S. J., 1459 Chiura, Hiroshi X., 1680 Cho, Jae-yong, 1350 Chohan, Shahid N., 2859 Choi, E.-S., 1947 Choi, Jong-il, 4897 Choi, Seong Ho, 1663 Choo, Dong-Won, 486 Christensen, Bjarke B., 1902, 2247 Christensen, Bjarke Bak, 721 Christensen, Douglas P., 3147 Christensen, Tove, 3232 Christiansen, Nina, 1860 Chu, Fun Sun, 3718 Chu, Kung-Hui, 3451 Churchill, Perry F., 607, 5046 Cintas, Luis M., 4536 Cittone, Henry, 1133 Clancy, J. L., 4495 Clardy, Jon, 4683 Clare, Bruce G., 3977 Clarke, Robert C., 366 Clawson, Michael L., 3539 Clerc, Agathe, 1180 Cleveland, C. C., 172 Cleveland, Thomas E., 4834 Cliver, Dean O., 504, 1954 Coates, John D., 1504 Cocaign-Bousquet, M., 2485 Cochran, Pamela K., 2308 Coconnier, Marie-Helene, 4573 Coffey, Aidan, 4618 Coffman, Allen D., 3707 Cohen, Yehuda, 2943 Cole, E. C., 3807 Cole, M. B., 459 Collins, J. K., 2192 Collins, Michael T., 999 Collins, Patrick J., 2026 Combourieu, B., 153, 159 Condón, S., 465 Conn, David Bruce, 427 Constant, Philippe, 4246 Contzen, Matthias, 2315 Cook, D. W., 1459 Coolbear, Tim, 588, 1673 Coolen, Marco J. L., 4513 Copeland, Les, 2859 Corapcioglu, M. Yavuz, 405 Cord-Ruwisch, Ralf, 2232 Corkidi, G., 1400 Corlew-Newman, H., 651

Cornejo, Brandon J., 3099

Correa Bueno, Odair, 4820 Correia, António, 1276 Corroler, D., 4729 Corstjens, P. L. A. M., 3556 Cortés, Estrella, 2187 Cortesi, Paolo, 2988 Corthier, G., 2721 Corzo, Javier, 902 Coschigano, Peter W., 1650 Costello, Andria M., 2899 Cote, Gregory L., 3096 Coughlan, Andrew P., 5004 Couteaudier, Yvonne, 88 Coutinho, T. A., 2094 Crandall, Allison D., 231 Cranfield, Michael R., 427 Crawford, Melissa R., 1584 Crawford, Ronald L., 3759 Cray, William C., Jr., 1975 Crill, Patrick M., 1864 Crow, V. L., 2111 Crowley, David E., 178 Crundwell, F. K., 3570 Cruz-Sánchez, José María, 1555 Csonka, Laszlo N., 4095 Cuadros-Hansson, Rocio, 3246 Cui, Xiao-Yuan, 3195 Culiañez-Macià, Francisco A., 4028 Cullen, Daniel, 1924, 3536 Culotta, Valeria C., 2601 Cutter, Leah, 2966 Cutter, Leah A., 3359 Cypionka, Heribert, 1890

Daae, Frida Lise, 2739 Daboussi, Marie-Josée, 633 Da Costa, Milton S., 3591 da Cruz, Davi William, 3860 Dahlberg, Cecilia, 2670 Dairi, Tohru, 549 Dalsgaard, A., 7 Dalsgaard, Anders, 1721, 3499, 4676 Dalsgaard, I., 7 Dalsgaard, Inger, 1721, 4676 Damgaard, Lars R., 864 Danganan, Clyde E., 2086 Daniels, Thomas J., 4663 Danovaro, R., 3238 Danovaro, Roberto, 3838 Dartois, V., 1594 Dartois, Véronique, 1466 das Graças C. Pereira, Maria, 1584 Davey, Michelle L., 138 Davies, Julia M., 1569 Davies, Stephen, 2020 Davis, Brian P., 94 Davis, J. R., 3846 Davis, Meryl A., 3232 Davison, S., 1983 Dean, D. H., 756 Dean, Jeffrey F. D., 1766 De Antoni, Graciela L., 21 Dearborn, D., 3620 de Beer, Dirk, 3480, 3731 Debevere, J., 1640 de Bont, J. A. M., 1333 de Bont, Jan A. M., 3009 de Bruijn, Frans J., 2096, 3954, 4044 Deckwer, Wolf-Dieter, 1731

De Decker, N., 1563 Dedysh, Svetlana N., 922 Deegenaars, Michelle L., 3063 Deere, D., 1669 Defrank, Joseph J., 2601 de Graaff, Leo H., 1412, 3615 DeGrandis, S., 2346 De Grandis, Stephanie A., 4210 Degrassi, Giuliano, 789 Deguchi, Tetsuya, 1366 Deidda, Delia, 1161 Dejesus, Indhira, 1715 De Jonckheere, Johan F., 2977 de Jonge, Boudewijn, 1950 de Koning, Wim, 208 de la Rubia, T., 2726 Delécluse, A., 3910 Delécluse, Armelle, 4174 De Leij, Frans A. A. M., 2634 Delgado, Mónica, 2380 Delgaizo, Victoria B., 2361 Dell'Anno, A., 3238 Delong, Edward F., 258, 1133, 3075 DeLong, E. F., 2585 De Lorenzo, Giulia, 1497 De Lorenzo, Victor, 4040, 748 Delorme, C., 2721 Delort, Anne-Marie, 74, 153, 159 de los Reyes, Francis L., III, 2503 de los Reyes, M. Fiorella, 2503 Del Torre, Manuela, 1075 de Mendoza, Diego, 850 den Dulk, J., 3556 Deng, Ming Qi, 1954 Denis-Larose, Claude, 4363 Dennie, D., 4603 Dennis, Jonathan J., 2710 DePaola, A., 1459 DePaola, Angelo, 346, 4676 De Philippis, Roberto, 1130 DePonte, Joseph, III, 1805 De Ridder, Chantal, 3464, 3491 de Sánchez, S. R., 3690 Desiere, Frank, 446 Desmasures, N., 4729 Desmerger, Christophe, 2105 de Souza, Mervyn L., 178, 2323 Deutz, Inge, 4736 de Vos, Willem M., 2763, 3854, 4581, 4588 de Vries, N., 5033 de Vries, Ronald P., 3615 de Vrind, J. P. M., 3556 de Vrind-de Jong, E. W., 3556 Deweerd, Kim A., 1786 De Wever, Helene, 3270 Dias, Benjamin, 3320, 3327 Diaz-Orejas, Ramon, 4040 Díaz-Raviña, Montserrat, 238 Diaz-Uribe, R., 1400 DiChristina, Thomas J., 2716 Dickman, Martin B., 2539 Dielbandhoesing, S. K., 4047 Diep, Dzung Bao, 2269 Dieuleveux, V., 800 Di Gioia, Diana, 1940 Di Giovanni, George D., 2545 Dikshit, Kanak L., 2220 di Menna, Margaret E., 601

Dinarieva, Tatiana Y., 1256

Dinicola, Richard S., 1560 Dion, Eric, 4748 Di Pietro, Antonio, 1967 Disalvo, Edgardo A., 21 Ditton, Hans-Jürgen, 760 Diviès, C., 1594 Diviès, Charles, 1466 Dixon, David R., 370 Dixon, D. George, 3663 Dobson, Alan D. W., 2026 Dodd, Christine E. R., 1323 Dodd, Helen M., 818 Dohmoto, Nobuhiko, 681 Doi, Roy H., 1086 Doi, Yoshiharu, 3437 Dojka, Michael A., 3110, 3869 Dolla, Alain, 1308 Dols, Marguerite, 1298 Dombroski, Carol S., 1147 Domínguez, Angel, 2403 Doran, Joel, 1256 Dos Santos, Raquel G., 564 Doukyu, Noriyuki, 1929 Doumas, Agnès, 4809 Doumbou, Cyr Lézin, 4313 Dowd, Patrick F., 4482 Dowd, Scot E., 333, 405, 3332 Dowling, D., 2304 Downie, J. Allan, 1024 Drake, Maryanne, 4264 Drees, K. P., 3633 Dröge, Marcus, 2652 Du, W. L., 3713 Duan, Yanjun, 824 Duarte, Gabriela F., 2770 Dubey, J. P., 2278 Dubourdieu, Denis, 3887 Dufour, Alfred P., 678 Duineveld, Bernadette M., 4950 Duineveld, G. C. A., 3238 Dunlop, R. Hugo, 366 Dunning, J. C., 27 Dunny, Gary M., 1541 Duque, Estrella, 38 Durand, Jacinthe, 4637 Durand, Marie-Claire, 1308 DuTeau, Nancy M., 4994 Dutta, Tapan K., 1884 Duvic, Bernard, 2367 Dyer, John M., 4834 Dyhrman, Sonya, 2560 Dziurla, Marie-Antoinette, 2937

Eberl, Leo, 2247 Eberz, Günther, 453 Eckner, Karl F., 3079 Eddy, Laura P., 287 Edelson, S. G., 4533 Eder, Wolfgang, 3576 Edwards, Diane D., 2596 Egan, Sharon, 5061 Egashira, Takashi, 2520 Eggert, Claudia, 1548, 1766 Egli, Thomas, 2970 Ehmann, Michaela, 2616 Ehrlich, Kenneth C., 4834 Ehrlich, S. D., 2721 Eichenbaum, Zehava, 2763 Eichner, C., 3014 Eijsink, Vincent G. H., 2269, Eis, Nicole, 5064 Eisenmann, Heinrich, 1264 Ekins, A., 520 Elangovan, G., 756 Elashvili, Ilya, 2601 Elberson, Margaret A., 3359 Eldar, Avi, 4065 Ellar, David J., 4060 Ellis, Debra J., 1504 Elsgaard, Lars, 4168 Eltis, Lindsay D., 4637 Embleton, J. V., 3503 Embley, T. Martin, 2958 Emerson, Suzanne U., 4485 Emmert, Elizabeth A. B., 4683 Emond, Eric, 4748 Engelen, Bert, 2814 English, R. Samuel, 1580 Enriquez, F. Javier, 333 Ensign, Jerald C., 3029 Eriksson, Karl-Erik L., 1548, Erlandson, Martin, 4782 Esaki, Nobuyoshi, 486, 1029 Escaso, V., 325 Escriche, B., 1563 Ethier, Nathalie, 4428 Etzel, Ruth A., 3620 Evans, Victoria J., 1780

Eveleigh, Douglas E., 4774

Everbach, E. Carr, 3927

Everts, Frank, 1040

Fabiano, M., 3238 Fabiano, Mauro, 3838 Falco, Richard C., 4663 Fallick, Anthony E., 370 Farchaus, J. W., 982 Farley, C. Austin, 1070, 2736 Faure, A., 955 Fava, Fabio, 1940 Favelukes, Gabriel, 3520 Fayer, Ronald, 427, 1070, 2736 Federici, Brian A., 3932, 4174, 4368 Federle, Michael J., 2763 Fedorak, Phillip M., 2020 Fegatella, Fitri, 4433 Feijoo, Gumersindo, 2409 Feller, Georges, 1163 Felmy, Andrew R., 2295 Fels, Johannes, 3563 Felske, Andreas, 871, 4581, 4588 Feng, Guo Hong, 2275 Fenical, W., 1490 Ferdelman, Timothy G., 3731 Fermiñán, Encarnación, 2403 Fernandez, Diana, 633 Fesefeldt, Andreas, 3769 Ffrench-Constant, Richard H., 3036 Ficht, Thomas A., 3099 Field, Jim A., 830, 2026, 2350, 2409, 2853, 3225 Fields, Barry, 2256 Fields, Barry S., 1688 Fiers, Walter, 342 Fietto, Luciano G., 564 Fife, Dee Jay, 4555 Fiksdal, L., 1018 Filali-Maltouf, Abdelkarim,

Fillhart, Ronald C., 1430 Fimland, Gunnar, 5057 Findlay, Robert H., 3422 Finlay, Bland J., 203 Finster, Kai, 119 Fischer, Marc, 1359 Fischer, Peter, 246, 446, 3878 Fischer-Le Saux, Marion, 4246 Fisher, D. C., 651 Fisher, Madeline M., 4384 Fitzgerald, G., 2192 Fitzgerald, Gerald F., 4618 Fitzgerald, Nancy B., 1580 Flambard, Benedicte, 1991 Fleming, Henry P., 3159 Fleming, James T., 3698 Flikweert, Marcel T., 1303, 2133 Flint, Harry J., 3683 Fliss, Ismaïl, 4255 Flood, S. J. A., 3389 Floriano, Belén, 1871, 4883 Flury, Markus, 304 Focht, Dennis D., 2141 Fodor, Andras, 1188 Foegeding, Peggy M., 2490, Folch-Mallol, J. L., 1400 Forano, Evelyne, 74 Forney, Larry, 1220 Forney, Larry J., 2894 Forst, Steven, 1188 Fournand, David, 2844 Fowler, T. A., 3570 Fox, Jennifer E., 4930 Francis, Brian R., 2158 Francis, Kevin P., 3525 Francke, Wittko, 2215 Franks, Alison H., 3336 Fraser, Paul D., 1226, 2676 Freeman, James P., 3106 French, Christopher E., 2864 Frey, Joachim, 543 Fricker, Colin, 4658 Fricker, C. R., 4495 Friebe, A., 2386 Friendship, Robert M., 366 Fritsche, Wolfgang, 399 Fritschel, Scott J., 4390 Fritze, Hannu, 2173 Frostegård, Åsa, 238 Fruhner, L., 2346 Frutos, Roger, 4782 Fry, John C., 795 Fu, Rongdian, 53 Fuchs, Bernhard Maximilian, Fujita, Hiromi, 2705 Fukatsu, Takema, 3599 Fukuda, Kiyoshi, 4076 Fukuda, Masao, 2006, 2520 Fukuda, Rumi, 3352 Fukui, Manabu, 2943 Fukui, Toshiaki, 3437 Fuller, Nicholas J., 2051 Fulthorpe, Roberta, 4089 Fulthorpe, R. R., 1620 Fung, C. P., 2278 Fuqua, Clay, 3486 Fustier, Patrick, 192

Futamata, Hiroyuki, 4396 Gadient, Martin, 4446 Gallagher, Eugene, 2560 Galli, Enrica, 3626 Gallimore, C. I., 858 Gálvez, A., 4623 Gamble, William R., 4482 Gander, John E., 273 Gant, Vanya A., 2681 Gantzer, C., 4307 Ganushkina, Lyudmila A., 2723 Gänzle, Michael G., 2616 Gao, Anli, 4134 Gao, Lian-Yong, 126, 3127, 3134 Gao, Song, 4670 Gao, Yan, 4757 Garay, Esperanza, 3403 García, José L., 2187 Garcia-Graells, Cristina, 1566 García-Maceira, Fe I., 1967 García-Quintáns, Nieves, 850 García-Ruiz, Roberto, 2533 Garczynski, Stephen F., 2995 Gardiner, G., 2192 Garnier, Monique, 4566 Garthright, W. E., 1459 Garthwaite, Ian, 601 Gaskell, Jill, 1924, 3536 Gaspard, Sarra, 3188 Gasson, Michael J., 818 Gaudet, Geneviève, 74 Gauer, Matthias, 626 Gaus, Kristen P., 1115 Gaw, Catherine V., 1504 Gazenko, S. V., 3807, 4410 Ge, Baoxue, 3932 Gebhard, Frank, 1550 Gehrke, Tilman, 2743 Geiger, Jean-Paul, 633 Geilhausen, Barbara, 1816 Geiselbrecht, Allison D., 4703 Geißdörfer, Walter, 896, 1175 Gelderblom, Hans R., 4128 Geller, Daniel P., 4930 Gendre, François, 1157 Georgiou, George, 4891 Gerba, Charles P., 333, 3332 Gerday, Charles, 1163 Gerritse, Gijs, 2644 Gessesse, Amare, 3533 Gettemy, Jessica M., 569 Ghelardini, Patrizia, 4053 Ghiorse, William C., 784, 2281, 4439 Ghosh, M. M., 5023 Giard, Jean-Christophe, 4238 Gibbs, Moreland D., 1759 Gielkens, Marco M. C., 3615 Gilkes, Neil R., 2374 Gillan, David C., 3464 Gillespie, J. R., 3389 Gillevet, Patrick M., 2545 Gilman, Robert H., 2284 Ginestet, Philippe, 2266 Giovannetti, Manuela, 3473 Giovannoni, Stephen J., 294, 3075, 4522 Girones, Rosina, 3376, 4485 Gisi, Daniel, 1194 Givaudan, Alain, 2367 Givskov, Michael, 721, 2240, Glaasker, Erwin, 509

Gladu, I., 4603

Glick, Bernard R., 3663 Glöckner, Frank Oliver, 1895, 4299 Gloer, James B., 4482 Glynn, J. R., Jr., 2572 Gobet, Philippe, 1454 Goebel, Brett M., 3110 Gold, Michael H., 569 Goldman, Adrian, 3290 Golinski, P., 3084 Goller, Sabine P., 3202 Golubeva, Elena, 3036 Gomes, Newton C. M., 564 Gomes de Siqueira, Célia, 4820 Gomez-Gil, Bruno, 2318 González, Aldo E., 771 González, Juan E., 4600 Gonzalez, Patrice, 4149 González, Ramón A., 3520 González de Llano, D., 3512 Goedman, Amanda E., 2554 Goodwin, K. D., 4629 Gopal, P. K., 2111 Görisch, Helmut, 496 Görlach, Jenifer M., 385 Gorlatova, Natalia, 1029 Gort, G., 3846 Gossett, James M., 1270 Gottschal, Jan C., 1034 Gottschalk, Gerhard, 2454 Govan, V. A., 1983 Graber, Joseph R., 4333 Graczyk, Thaddeus K., 427, 1070, 2736 Graham, David W., 1115 Graham, Linda E., 4384 Grammel, I., 3014 Grangette, C., 1640 Grant, Irene R., 3153 Grasso, Daniel H., 3520 Green, J., 858 Green, William J., 3791 Greening, Richard C., 3429 Greer, Charles W., 2578, 4363 Gregg, Keith, 3496 Griffith, Gareth W., 4007 Griffiths, Mansel, 147 Grimm, Dorothee, 2686 Grinshpun, S. A., 3807, 4410 Gripon, Jean-Claude, 1230 Grobben, G. J., 1333 Gröning, Janosch, 3290 Großkopf, Regine, 960, 4983 Grossman, Matthew J., 4363 Groth, Casper, 3887 Guan, Yanfen, 4918 Guardabassi, Luca, 3499 Guard-Petter, Jean, 2166 Gueguen, M., 800, 4729 Guillén, F., 325 Guillot, Alain, 1230 Guldfeldt, Lars Uhre, 530 Gulledge, Jay, 4291 Gumpert, Johannes, 4862 Günata, Ziya, 3607 Gunsalus, Irwin C., 1884 Gupta, Amit, 5042 Gurst, Jerome E., 1447 Gutiérrez, A., 325 Gutiérrez-Navarro, Ángel M., 902 Guzman, Roberto Z., 1115 Gyles, Carlton, 4134

Haack, Bradley J., 126 Haack, Sheridan K., 3869 Haanstra, René, 2894 Habicht, Kirsten, 2943 Hacker, Jörg, 2686 Hadar, Yitzhak, 3175 Hagihara, Hiroshi, 3282 Hagström, Åke, 3246 Hahn, Martin W., 1910 Halasz, A., 2200 Halkier, Torben, 1601 Hall, Grahame H., 3674 Hallegraeff, Gustaaf M., 2806 Halpern, Matthew, 3927 Haltrich, Dietmar, 594 Hamasaki, Takashi, 166 Hamdorf, Brenton, 3496 Hamelin, Jack, 1420 Hamman, O. Ben, 2726 Hammer, Elke, 2215 Hammer, Karin, 82 Hammerschmidt, Friedrich, 356 Hammes, Walter P., 1359, 2616 Hamon, S., 3910 Han, Kyuboem, 4897 Hanashiro, Kaoru, 2520 Hancock, Robert E. W., 138 Hancock, Tracy L. Connell, 2899 Handelsman, Jo, 4683 Hänninen, Marja-Liisa, 3998 Hanselmann, Kurt W., 2566 Hansen, Jørgen, 3887 Happonen, Irmeli, 3998 Hara-Kudo, Yukiko, 1532 Harayama, Shigeaki, 681, 1203, Harb, Omar S., 126, 3127, 3134 Harker, Alan R., 4353 Harly, Géraldine, 1454 Harms, Hauke, 1264 Harmsen, Hermie J. M., 3336 Harris, D. C., 3846 Harriss, Robert C., 1864 Härtig, Elisabeth, 3092 Hartke, Axel, 4238 Harvey, R. W., 618 Harwood, Colin R., 2875 Hashimoto, Wataru, 3765 Hastings, Richard C., 3674 Hatada, Yuji, 3282 Hatano, Naoya, 2920 Hatcher, Patrick G., 1447 Hatta, Takashi, 2006 Hattori, Takefumi, 2624 Hauben, Kristel J. A., 1566 Hauben, L., 3966 Hauer, Bernhard, 3878 Haukka, Kaisa, 419 Hausner, Martina, 4115 Havelaar, A. H., 4460 Hawari, Jalal, 2200, 2578, 4363 Hay, Anthony, 178 Hay, Anthony G., 2141 Hayashi, Miyuki, 472 Haygood, M. G., 3549 Hays, M. P., 3389 Hazeleger, Wilma C., 3917 He, Lee M., 1123 Heath, Sekou, 3066 Hecht, Hans-Jürgen, 3290 Hedlund, Brian P., 4703 Heidrich, Christoph, 3140

Heikkinen, J. Pekka, 4084 Heinfling, A., 2788 Heinzkill, Marion, 1601 Hekmat, Dariusch, 930 Heldwein, Stefan, 3576 Helin, J., 1338, 4767 Helinck, Sandra, 1991 Helinski, Donald R., 2822 Heller, Werner, 3305 Hemery, Elisabeth, 4573 Hemond, Harold F., 1715 Henckes, Gilles, 3416 Henderson, Kerrin, 3496 Hendrickson, William, 2086 Hennig, L., 2386 Henriksen, Kaj, 4711 Henriquez, Vitalia, 3066 Henshilwood, K., 858 Henze, Sheri, 3052 Herlihy, Yvonne M., 733 Hermansson, Malte, 2670 Hernández, Alicia, 4317 Hernandez, Mark, 2503 Hernández, Pablo E., 818, 4536 Herranz, Carmen, 4536 Herrera-Estrella, Alfredo, 1442 Herrera-Vega, Maria A., 2318 Herrick, J. B., 3633 Hershko, Hannah, 4065 Hertel, Christian, 1359 Hertkorn, Norbert, 3305 Herzog, Roland W., 2229 Hess, J. Michael, 2357 Hess, Thomas F., 3759 Hesse, Christian, 4202 Hettwer, Ursula, 3180 Hetz, Claudia, 1731 Heuer, Holger, 1220, 2814 Heulin, T., 3740 Heulin, Thierry, 2937 Hibi, Tadaaki, 3983 Hielm, Sebastian, 703, 4161 Hill, Colin, 439, 2287, 4618 Hill, Karen K., 1006, 2463 Hill, Russell T., 3383 Hillen. Wolfgang, 896, 1175 Hines, Mark E., 1864 Hinkley, Simon, 3620 Hino, Sanae, 1203 Hintikka, Eeva-Liisa, 3620 Hiom, Sarah J., 795 Hiraishi, Akira, 992, 1680 Hiraoka, Sachiko, 4015 Hirasawa, Ayako, 2920 Hirschler, Agnes, 1576 Ho, Nancy W. Y., 1852 Hocquart, Sophie, 2105 Hodge, N. C., 3961 Hoffmann, Andrea, 2652, 2660 Höfle, Manfred G., 431, 1910, 3776, 5000 Hofrichter, Martin, 399 Hohn, Thomas M., 221 Hohnstock, A. M., 3633 Høi, L., 7 Høi, Lise, 1721, 4676 Hoier, Helga, 3290 Hoischen, Christian, 4862 Holben, William E., 2528, 4084 Holland, R., 2111 Höller, Christiane, 581 Holliger, Christof, 3188 Hollingsworth. Rawle I., 1963

Holt, Scott M., 3096 Hommes, Norman G., 1372 Hommes, Ronald W. J., 2644 Hong-Liang, Sun, 2237 Hoodless, Andrew N., 1169 Hoque, Enamul, 3305 Hörber, Christine, 1860 Horikoshi, Koki, 1510 Horinouchi, Sueharu, 4340 Horn, Nikki, 818 Horne, Diane, 2147 Hoshino, Takayuki, 4328 Hovanec, Timothy A., 258 Hovde, Carolyn J., 3166 Hsu, Wei-Yea, 2701 Hu, Kaiji, 3214 Huang, Ching-Tsan, 1526, 4035 Huber, Harald, 3576 Huber, Robert, 3576 Hübner, Anette, 2086 Huertas, María-José, 38 Huertas-González, M. Dolores, 1967 Hugenholtz, Jeroen, 1950 Hugenholtz, Philip, 3869 Hughes, Martin N., 3195 Huis in't Veld, J. H. J., 5033 Huisman, O. C., 3846 Humpheson, L., 459 Hunsucker, J. C., 1459 Hutkins, Robert W., 3147

Ichi-ishi, Akihiko, 1086 Ichikawa, Norikazu, 1845 Igarashi, Kazuaki, 3282 Iizumi, Taro, 3656 Imada, Chiaki, 472 Imazu, Kazuya, 3754 Imbernon, Micheline, 2105 Inamori, Yoshihiko, 472, 2920 Ingram-Smith, Cheryl, 1290 Ingvorsen, Kjeld, 1700 Inniss, William E., 2578 Inoue, Yoshiharu, 4076 Irwin, G. Stewart, 2278 Isaac-Renton, Judith, 2278 Isawa, Tsuyoshi, 1845 Ishiguro, Fubito, 2705 Ishihara, Junko, 992 Ishihara, Kenii, 479 Ishii, Tadashi, 4021 Ismail, Tharwat F., 363 Ito, Saeko, 549 Ito, Susumu, 3282 Itoh, Nobuya, 549 Itoh, Yoshinori, 1532 Iwahashi, Hitoshi, 4614 Iwaki, Atsue, 2705 Iwaki, Masaaki, 1532

Hynes, Michael J., 3232

Hyytiä, Eija, 703, 4161

Jack, Ralph, 5057
Jack, Ralph W., 3140
Jackson, Colin R., 5046
Jackson, Paul J., 1006, 2463
Jacobs, Surrey W. L., 601
Jacques, Marie-Agnès, 4789
Jaeckel, Frank R., 3180
Jäger, Cornelie, 4234
Jakobsen, Kjetill S., 34, 2639
Jalava, Katri, 3998
Janes, M. E., 4403
Jannasch, H. W., 4057

Janse, Bernard J. H., 1924, 3536 Janse, J. D., 4546 Jansen, Gijsbert J., 3336 Jansens, S., 1563 Janssen, Dick B., 208, 2800, Janssen, Peter H., 960, 4830 Janzen-Blunck, Birgit, 581 Jarvis, Bruce B., 3620 Jayachandran, K., 3368 Jayaraman, Kunthala, 756 Jayaswal, R. K., 763 Jaykus, Lee-Ann, 4264 Jeffries, Thomas W., 94, 1350 Jendrek, S., 982 Jenkins, K. M., 1490 Jenkins, Michael B., 784 Jensen, Ellen C., 575 Jensen, Peter Ruhdal, 82 Jensen, P. R., 1490 Jensen, Sigmund, 1143, 2739 Jerez, Carlos A., 2380, 4990 Jiang, Jian, 3620 Jiang, Sunny C., 535, 2780 Jiménez-Díaz, Rufino, 1871, 4883 Joannou, Christopher L., 3195 Jofre, Joan, 3376, 4485 Jofre, Juan, 2443 Johnson, D. Barrie, 2181 Johnson, Jennifer L., 4390 Johnson, John A., 4555 Johnson, M. G., 4403 Johnson, Michael G., 3070 Johnson, Roger, 147, 4134 Joint, Ian R., 2051 Jones, J. B., 3961 Jørgensen, Bo Barker, 2943 Joseph, Cecillia M., 3954 Josephsen, Jytte, 2424 Joshi, Biren K., 4482 Joshi, Lokesh, 709 Joshi, Meenal, 2220 Josten, Michaele, 3140 Jothikumar, N., 504 Juárez-Pérez, Victor, 4782 Juillard, Vincent, 1230, 1991 Jung, Günther, 3140, 5057 Juretschko, Stefan, 3042 Jury, William A., 304

Kadiyala, Venkateswarlu, 2479 Kakezawa, Masaaki, 1366 Kalisz, Henryk M., 1405 Kalkkinen, Nisse, 2079 Kallifidas, Dimitrios, 5061 Kamagata, Yoichi, 5008 Kanagawa, Takahiro, 5008 Kaneko, Satoshi, 4021, 4489 Kanemori, Masaaki, 1694 Kang, Yaowei, 3939 Kankaanpää, Pasi, 515 Karp, Matti, 515 Kasahara, Tatsuhide, 836 Kase, Toshiya, 4340 Kashiwagi, Aya, 890 Kashket, Eva R., 1780 Kasman, Laura M., 2995 Kaspar, C. W., 1390 Kästner, Matthias, 359 Kasuga, Fumiko, 1532 Kataoka, Michihiko, 549

Katayama, Yoshihiro, 836, 2520 Kathirvel, M., 756 Kato, Chiaki, 1510 Kato, Junichi, 2061, 3754 Kato, Kenji, 1680 Kaucner, Christine, 1743 Kaufman, M. G., 752 Kawabata, Masato, 2705 Kawabata, Shun-Ichiro, 3648 Kawaguchi, Takashi, 4857 Kawai, Shinya, 836 Kawai, Shuji, 3282 Kearns, L. P., 1837 Keeton, Timothy P., 2158 Keevil, C. William, 733 Kehrmeyer, S. R., 2730 Keim, Paul, 1006 Keller, Jürg, 1878 Kellogg, Christina A., 535 Kelly, Robert M., 2357 Kennedy, Ann C., 4062 Kent, Angela D., 1657 Kerkhof, L., 4877 Kerovuo, Janne, 2079 Kersten, Philip J., 68 Kertesz, Michael, 1933 Khan, Ashraf A., 2473 Khbaya, Bouchaib, 4912 Kiene, Ronald P., 1045 Kiikkilä, Oili, 2173 Kilburn, Douglas G., 2374 Kilstrup, Mogens, 4321 Kim, Byung-Joon, 3300 Kim, Christopher, 3004 Kim, Eungbin, 2473 Kim, I.-G., 1947 Kim, John S., 4930 Kim, Kwang-Hee, 226 Kim, Kwi S., 1919 Kim, Yung Bu, 1153 Kimbara, Kazuhide, 2520 Kimmel, Stacy A., 659 Kimura, Akira, 4076 Kimura, Tetsuya, 411 King, Arlene, 2278 King, G. M., 253, 1091, 1099, King, Linda L., 1133 Kingma, Jaap, 2800 Kinner, N. E., 618 Kirk, Marion, 2335 Kirkpatrick, B. C., 3818 Kisaalita, William S., 1472 Kishi, Hidekazu, 2006 Kitagawa, Masanari, 1694 Kitamoto, Katsuhiko, 4076 Kitanidis, Peter K., 2044 Kitaoka, Yoshihisa, 1366 Kitzen, V. A., 1333 Kiyokawa, Yoshifumi, 4076 Kjær, Thomas, 3264 Kjelleberg, Staffan, 4433 Kjøller, Annelise, 613 Klaenhammer, Todd R., 1147 Kleeberg, Ilona, 1731 Kleerebezem, Michiel, 2763 Klein, Donald A., 2284 Klein, Günter, 1825 Klein, Michaela, 4862 Klemm, Per, 1628 Klieve, Athol V., 1796 Klima, J., 688 Klis, F. M., 4047

Klotz, Alan V., 4423 Klug, Birte, 1980, 3089 Klug, Michael J., 752 Klug, M. J., 651 Kluge, M., 2386 Kmiecik, Kenneth, 2630 Knackmuss, Hans-Joachim, 246, 446, 2315 Knowles, R., 520 Knowles, Roger, 2397 Kobayashi, Chitose, 1607 Kobayashi, Hideyuki, 4021, Kobayashi, Shin-Ichiro, 1607 Kobayashi, Tohru, 3282 Koch, A. L., 3900 Koh, Mei-Hsien, 1759 Kohler, Josiane, 4446 Koike, Isao, 3352 Kok, A., 3238 Kok, Jan, 4736, 4842 Kokjohn, Tyler A., 575 Kolb, Charles E., 1864 Kolli, V. S. Kumar, 4930 Komatsu, Yasuhiko, 4614 Kondo, Jeffery K., 4748 Kondo, Keiji, 1226, 2676 Konings, W. N., 1594 Koningstein, G., 392 Konuma, Hirotaka, 1532 Koo, Kai, 2490, 2497 Koops, Hans-Peter, 3042 Kopecny, Jan. 3496 Korkeala, Hannu, 703, 4161 Korkeala, H. J., 3313 Korpi, Anne, 2914 Kortstee, G. J. J., 2925 Kostecki, M., 3084 Kosuge, Takehide, 4328 Kotterman, Michiel J. J., 2853 Kovářová, Karin, 2970 Kowalchuk, George A., 2953 Koyama, Takumi, 166 Kraiß, Anita, 4697 Kreader, Carol A., 4103 Kroer, Niels, 1902 Kroppenstedt, Reiner Michael, Kroppenstedt, R. M., 4767 Krowas, Dirk, 2215 Krumholz, Lee R., 1715 Kuai, Linping, 4500 Kubicek, Christian P., 3202 Kubota, Shoko, 836 Kudva, Indira T., 3166 Kuehn, Kevin A., 607 Kuehn, Martin, 4115 Kuever, J., 4057 Kuever, Jan, 4650 Kuhn, Silvia, 1972 Kuhnt, Michaela, 714 Kuipers, Oscar P., 2763 Kujo, Chizu, 2152 Kulakauskas, Saulius, 3059 Kulbe, Klaus D., 594 Kumagai, Hiromichi, 555 Kumagai, Susumu, 1532 Kumai, Sumio, 2982 Kumar, H. D., 1545 Kümmerle, Michael, 2207 Kumura, H., 4591 Kunz, Daniel A., 4452

Kurihara, Tatsuo, 486, 1029

Kuroda, Akio, 2061, 3754 Kurokawa, Hajime, 3397 Kurokawa, Ken, 1536 Kurtenbach, Klaus, 1169 Kusakabe, Isao, 4021, 4489 Kushmaro, A., 1379 Kuske, Cheryl R., 2463 Kussmaul, Martin, 4530 Kusters, J. G., 5033 Kusznir, Eric, 4446 Küver, Jan, 2943 Kwakye, Sylvia, 3927 Kwast, Kurt E., 1040 Kwon, Y. M., 3458

Labarère, Jacques, 4149 Labbé, Diane, 4363 Lafay, Bénédicte, 3989 LaFayette, Peter R., 1766 Lafond, Alain, 192 Lal, Altaf A., 2736 Lam, Bach-Tuyet, 2937 Lamarche, François, 192 Lamosa, Pedro, 3591 Lampel, Jay S., 1580 Lampis, Giorgio, 1161 Landau, L., 1379 Landmeyer, James E., 1560 Lane, Geoffrey A., 601 Lange, M., 1640 Langille, Stephen E., 2906 Langin, Thierry, 633 Langworthy, Donald E., 3422 Lanoil, Brian D., 3075 Laplace, Jean-Marie, 4238 Lapujade, P., 2485 Larkin, Michael J., 2931 Larsen, Eric D., 4555 Larsen, Frank, 34, 2639 Larsen, J. L., 7 Larsen, Lars Hauer, 3264 Lasa, Iñigo, 4028 Latch, Garrick C. M., 601 Lau, Peter C. K., 4363 Lauraeus, Marko, 2079 Laveran, Henri, 3118 Lawlor, Kirsten, 1319 Lawrence, Lorna M., 733 Layton, A. C., 5023 Lazarovits, G., 3846 Le, Jianhua, 4663 Leach, Jan E., 1663 Leach, Steve A., 733 Leal-Morales, Carlos A., 1442 Leão, Cecília, 665 Lebaron, P., 2697 Lebaron, Philippe, 1725 Le Bars, Dominique, 1230 Le Bussy, Olivier, 1163 Ledeboer, Aat, 4736 Lee, Julie C., 4683 Lee, Kit W., 575 Lee, Kyu-Ho, 805 Lee, Myeong S., 4796 Lee, Sang Yup, 4897 Lee, S.-H., 1947 Leedle, Jane A. Z., 3429 Leenhouts, Kees, 4736 Lees, D. N., 858 Lefebvre, Rance B., 1584 Le Gall, Fabrice, 4566 Lehmacher, Anselm, 2449

Lei, Wen-Yee, 5012

Leisinger, Thomas, 646, 1194, 1933 Lenke, Hiltrud, 246, 446 Leon, Oscar, 4378 Léonard, David, 1 Leonard, Thomas J., 2275 Lepeuple, Anne-Sophie, 4142 Lépine, F., 4603 Lepp, Paul W., 4467 Le Rudulier, Daniel, 3954 Leslie, J. F., 2094 Letellier, Lucienne, 3416 Le Van, Tricia D., 3429 Levicán, Gloria, 4990 Lewis, Earl J., 1070, 2736 Lhotte, M. E., 1594 Li, Bin, 2748 Li, Huaiyu, 1812 Li, Jieran, 3507 Li, Lina, 1510 Li, Muqing, 2705 Liao, Ching-Hsing, 914 Lidstrom, Mary E., 2899 Liesack, Werner, 119, 960, 4983 Lievin, Vanessa, 4573 Lilburn, Timothy G., 1919 Lilius, Esa-Matti, 515 Lim, Julianne, 4433 Lin, Senjie, 3052 Lina, Laura, 4965 Lindblad, Peter, 310 Lindley, Nicholas D., 1 Lindow, S. E., 3256 Lindström, Kristina, 419, 1634 Lineri, Sanna, 515 Liptaj, Tibor, 74 Lisle, John T., 4658 Little, E. L., 3818 Little, S. F., 982 Liu, Biing-Hui, 3718 Liu, Ji-Quan, 549 Liu, Minghsun, 4600 Liu, Song Yu, 3972 Liu, S.-Q., 2111 Liu, Wen-Tso, 1220 Liu, Ying Chun, 3346 Liu, Yong-Biao, 1385 Liyanage, Hemachandra, 1780 Llobet-Brossa, Enric, 2691 Lloret, Javier, 1024 Lloyd, David, 203 Lloyd, Jon R., 4607 Locke, T., 3846 Lockwood, Katherine, 763 Loferer-Krößbacher, M., 688 Löffler, Frank E., 3507 Logi, Cable, 3473 Logrieco, A., 3084 Logrieco, Antonio, 3923 Lohrke, S., 2304 Lojou, Elisabeth, 1308 Lolkema, J. S., 1594 Lontoh, Sonny, 1106 Lopez, José, 1454 Lopez, Lorena, 4965 López, María Verónica, 3520 López, Paloma, 850 Lorén, José G., 1344 Lorenz, Helga, 4234 Lorenzen, Jan, 3264 Loubiere, P., 2485 Lovejoy, Connie, 2806 Lovell, Charles R., 4276

Lovley, Derek R., 775, 1504, 1937, 2232, 3102 Low, Deborah, 2147 Loya, Y., 1379 Lu, Ping, 94 Lucena, Francisco, 3376 Luchansky, John B., 4842 Ludescher, Richard D., 3530 Ludwig, Wolfgang, 930, 2686, 4973 Luirink, Joen, 392 Lukowiak, Andrew A., 2995 Lundgren, Pernilla, 3052 Luppens, Suzanne B. I., 2301 Lutbiz, Werner, 4904 Lutz, Martina, 2315 Lutz-Wahl, Sabine, 3878 Lynch, James M., 2634 Lytle, Betsy L., 98

Ma, Biao, 569 Ma, Y., 27 Maaroufi, Halim, 4637 Maaty, Walid S. A., 2158 Macaskie, Lynne E., 1319, 4607 MacCabe, Andrew P., 1412 MacKenzie, Samuel, 2869 Mackey, B. M., 1313 Mackiewicz, M., 352 Madigan, John E., 2888 Madritch, Michael, 948 Madsen, Annette, 2424 Madsen, E. L., 3633 Madsen, Peter L., 4711 Magee, Wayne E., 1812 Mägli, Andreas, 646 Magni, Christian, 850 Magnuson, Jon K., 1270 Mahanty, H. K., 1837 Mahne, Ivan, 3584 Mahro, Bernd, 359 Maiwald, Matthias, 760 Mäki, Brita R. E., 4084 Maki, Yonosuke, 1680 Malakul, Pomthong, 4610 Malamy, Michael H., 1805 Malke, Horst, 2439 Malkomes, Hans-Peter, 2814 Mallick, N., 1545 Maltini, Enrico, 1075 Manasherob, Robert, 1750 Mancassola, Roseline, 1454 Manceau, Charles, 1180 Mande, Shekhar, 2220 Mangin, 1., 4729 Mann, Nicholas H., 2051 Mansfield, Shawn D., 2374 Mansur, Mariana, 771 Mäntynen, Vesa, 1634 Manz, Werner, 496 Maqueda, M., 4623 Marasas, W. F. O., 2094 Marcelis, Christian L. M., 2301 Marchesi, Julian R., 795 Marcinek, Herbert, 626 Marcus, Jonathan, 4663 Margheri, Maria Cristina, 1130 Mariam, Tadesse W., 504 Marqués, Silvia, 38 Marquis, R. E., 27 Marra, Diana, 2763 Mars, Astrid E., 208 Marsh, Philip D., 733

Marshall, Sergio, 3066 Marshall, Sergio L., 601 Martín, Juan F., 1276 Martin, Tracey A., 795 Martínez, A. T., 325, 2788 Martínez, J., 2726 Martínez, José L., 4317 Martínez, José M., 818, 4536 Martínez, María I., 818, 4536 Martínez, M. J., 325, 2788 Martínez-Molina, Eustoquio, Martino, Manuela, 3626 Martins, Lígia O., 3591 Marty-Teysset, C., 1594 Masai, Eiji, 2006, 2520 Masneuf, Isabelle, 3887 Mason, David J., 2681 Massana, R., 2585 Massana, Ramon, 1133 Masson, Luke, 4782 Master, Emma R., 4823 Masters, C. I., 1313 Masuzawa, Toshiyuki, 2705 Mateos, Pedro F., 1555 Materassi, Riccardo, 1130 Matheron, Christelle, 74 Matheron, Robert, 1576 Mathieu, L., 197 Matos, J., 4591 Matsushima, Ken-ichiro, 166 Mattes, Ralf, 4862 Matthysse, Ann G., 2341 Matuschka, Franz-Rainer, 1980, 3089, 4596 Mau, Margit, 185 Maul, A., 4307 Maul, Armand, 3118 Mauléon, Hervé, 4246 Maullu, Carlo, 1161 May, Harold D., 1052, 2966, Maynard, Jennifer A., 112 Maynes, Maria, 5042 Mayorga, Pablo, 2409 Mayr, Ralf, 3525 McAuliffe, Olivia, 439 McCaig, Allison E., 2958 McCallus, Daniel E., 914 McCarthy, Alan J., 3674 McCarty, Perry L., 2044 McClure, Nicholas C., 3977 McCormick, John K., 4757 McCormick, Susan P., 221 McCuin, R. M., 4495 McEwen, Scott A., 366 McFall-Ngai, Margaret J., 3209 McFeters, Gordon A., 1526, 2596, 4035, 4658 McGarvey, Jeffery A., 1328 McGonigal, T., 793 McGowan, Catherine, 4089 McGrath, John W., 356, 2291 McGuiggan, James T. M., 733 McIntosh, D., 4194 McIntyre, Peter S., 203 McKay, Larry L., 1541, 1673 McKillip, John L., 4264 McLean, Robert J. C., 3486 McLennan, Alan M., 2554 McMahan, Susan, 2341 McMahon, Donald J., 2147

McMullen, Lynn M., 4757

McNab, B., 2346 McNall, Rebecca J., 2995 McNeil, Brian, 4643 McSpadden Gardener, Brian B., 880, 4944 Meaden, P. G., 4194 Meaney, William J., 2287 Meckenstock, Rainer, 1264 Medema, G. J., 4460 Meek, Alan H., 366 Meeker, L. D., 618 Megušar, France, 3584 Meier, Heidi, 2449 Meijer, Wilco, 1950 Meinken, Kristin, 2814 Mellado, Rafael P., 4317 Mellon, Mark T., 3444 Mendes, Ieda C., 970 Mercier, Carine, 3059 Merkert, Hilde, 2686 Messer, James W., 678 Messina, Mariella, 1075 Messmer, Michael, 646 Mester, Tünde, 2409 Metcalf, William W., 768 Metzger, Jörg, 3140 Meyer, Elisabeth I., 1264 Meyer, Manfred, 3180 Meyers, D. M., 3713 Michel, Rolf, 1822 Michiels, Chris W., 1566, 3220 Middelhoven, P. Hans, 3275 Middelhoven, Wouter J., 1256 Mignotte, Berengere, 3118 Mikami, Tadahisa, 2920 Miki, Hikaru, 3765 Mikkola, R., 1338, 4767 Miles, Christopher O., 601 Milgroom, Michael G., 2988 Miller, Karen J., 1290 Miller, Karen S., 4555 Miller, Kurt W., 14, 1997 Miller, Laurence G., 4357 Miller, Morten, 613 Miller, Paul E., 2888 Miller, Scott R., 3893 Mills, David A., 1541 Millsap, Kevin, 2418 Milner, Jocelyn L., 4683 Minamisawa, Kiwamu, 1845 Mincer, Tracy J., 2822 Minnaard, Yessica, 21 Minton, Nigel P., 1612 Misawa, Norihiko, 1226, 2676 Mitchell, Wilfrid J., 1612 Mitsutani, Atsushi, 2061 Miura, Yutaka, 1226, 2676 Miyamoto, Katsushiro, 472, 2920 Mizumoto, Masahiro, 3656 Mizunoe, Yoshimitsu, 3648 Moar, William J., 1385 Mohn, William W., 4823 Mohran, Zaynab S., 363 Moineau, Sylvain, 4255, 4748 Mol, L., 3846 Molin, Søren, 721, 1902, 2072, 2240, 2247, 4904 Molina, Lázaro, 2072, 4904 Moll, Deborah M., 2755 Møller, Søren, 721, 2247 Molyneaux, S., 4057 Momose, Haruo, 492

Monbouquette, Harold G., Monchois, Vincent, 1644 Monier, Jean-Michel, 4789 Monnet, V., 4591 Monod, Michel, 4809 Monsan, P., 1298 Monsan, Pierre, 1644 Monschau, Nicole, 4283 Montalbano, Beverly, 4834 Montemagno, Carlo, 2281 Montville, Thomas J., 231, 3530 4416 Mooberry, Ed S., 4670 Mooibroek, Hans, 4689 Moore, Edward R. B., 2652 Moore, E. R. B., 3014 Moorman, T. B., 3368 Moosmayer, Dieter, 4862 Moreira, María Teresa, 2409 Moretti, A., 3084 Moretti, Antonio, 3923 Morgan, Richard, 3669 Morigaki, Tadaaki, 1153 Moriguchi, Mitsuaki, 3397 Morikawa, Yasushi, 555, 890 Moriñigo, Miguel A., 1573, 4269 Morohoshi, Noriyuki, 836 Morris, Cindy E., 4789 Morris, Daniel D., 1759 Morris, Nicola S., 3486 Morris, Patricia J. L., 1736 Morrison, Donald A., 4796 Mortimer, Fiona C., 2681 Motes, Miles L., 346 Motes, M. L., 1459 Moyana, Terence, 2869 Muccini, M., 5023 Mulberry, Michael J., 2716 Müller, Francis, 4446 Müller, Rolf-Joachim, 1731 Müller, Rudolf, 3114, 3507 Müller, Volker, 3813 Müller, W. H., 316 Mumpuni, A., 5053 Munch, Jean Charles, 2652, 2660 Muniesa, Maite, 2443 Munkvold, Gary, 3923 Muñoz, Delia, 4372 Murai, Toshiyuki, 4857 Murano, Erminio, 4378 Murata, Kousaku, 3765 Murata, Yoshinori, 2061 Murillo, Jesús, 3948 Murphy, James R., 363 Murray, A. E., 2585 Murray, Alison, 1133 Muscholl-Silberhorn, Albrecht, Mutalib, Shahilah Abdul, 1153 Mutharia, Lucy M., 138 Muyzer, Gerard, 3731, 4057,

Naciri, Muriel, 1454 Nagasaki, Hiroaki, 4489 Nagasawa, Toru, 4743 Nagata, Hiroyuki, 4015 Nagata, Shinichi, 3641 Nagata, Toshi, 3352 Nagel, Aaron C., 5049

4128, 4650

Nakahara, Tadaatsu, 62 Nakajima-Kambe, Toshiaki, 62 Nakamori, Shigeru, 1607 Nakamura, Kanji, 2006, 3656 Nakamura, Yuka, 1510 Nakasaki, Kiyohiko, 4015 Nakase, Takashi, 2982 Nakatsuka, Yoko, 1845 Nakaune, Ryoji, 3983 Nakayama, Akihiko, 479 Nam. S.-K., 1947 Nankai, Hirokazu, 3765 Nannapaneni, R., 4403 Nannapaneni, Ramakrishna, 3070 Nanny, Mark A., 1447 Nardi, M., 4591 Nasu, Masao, 1536 Navaratna, Maduwe A. D. B., 4803 Nawata, Osamu, 3983 Nelson, Karen E., 3824 Nelson, Peter J., 1759 Nes, Ingolf F., 2269, 3275, 5057 Nesme, Xavier, 1180 Neuvonen, Seppo, 2173 Neves, Maria José, 564 Newbold, C. James, 2836, 3683 Newcombe, David, 178 Newell, Diane G., 1816 Newell, S. Y., 1484 Newman, H. N., 3503 Newsome, Anthony L., 1688 Neyra, Marc, 4912 Nickerson, Kenneth W., 575 Nicklin, Stephen, 2864 Nicolet, Jacques, 543 Nicoli, Jacques R., 564 Nidetzky, Bernd, 594 Nielsen, Mette Neiendam, 3563 Nienhuis, James, 2630 Nierop Groot, Masja N., 3009 Nies, Dietrich H., 453 Nieto, Joaquín J., 4095 Nieto-Sotelo, J., 1400 Nikoh, Naruo, 3599 Nikulin, Marjo, 3620 Nilsson, Dan, 4321 Nishibuchi, Mitsuaki, 1153 Nishida, Tomoaki, 1366 Nishiguchi, Michele K., 3209 Nishihara, Kazuyo, 1694 Nishikawa, Seiji, 836, 2520 Nishino, Shirley F., 4185 Nissen-Meyer, Jon, 2269, 5057 Nobrega, Alberto, 3860 Nogawa, Masahiro, 890 Nogi, Yuichi, 1510 Noguchi, Yoko, 1532 Nomura, Nobuhiko, 62 Normand, Philippe, 4912 Normander, Bo, 1902 Noto, Kazuhiko, 2528 Novak, Jan. 2335 Novarino, G., 618 Nuñez-Valdez, María-Eugenia, 4965 Nurminen, Päivi, 2079 Nurminen, Päivi H., 4084 Nüsslein, Klaus, 1283 Nuttall, Patricia A., 1169 Nuutila, Jari, 515 Nwaka, Solomon, 4614

Oberg, Craig J., 2147 Oberst, R. D., 3389 Obi, Takahiro, 836 O'Brian, G., 3713 Obuchi, Kaoru, 4614 Ochs, Clifford A., 287 Odumeru, J., 2346 Oellers, Katja, 1359 O'Gara, F., 2304 Ogawa, Hiroshi, 3352 Ogawa, Masahiro, 2952 Ogawa, Masuhiro, 2982 Ogden, K. L., 2572 Ogunseitan, O. A., 695 Ohba, Misako, 4021 Ohmiya, Kunio, 411 Ohmomo, Sadahiro, 2982 Ohshima, Kenji, 890 Ohshima, Toshihisa, 2152 Ohshima, Yoshifumi, 2952 Ohsuye, Kazuhiro, 526 Ohtake, Hisao, 2061, 3754 Okabe, Youichi, 4073 Okada, Hirofumi, 555, 890 Okami, Yoshiro, 472 Okeke, Benedict C., 789 Okuda, Jun, 1153 Olivares, Heidi A., 4683 Oliver, James D., 3025 Olivier, Jean-Marc, 2105 Olsen, John E., 3499 Olson, Robert J., 1066 On, Stephen L. W., 3998 O'Neil, Julia P., 1736 Ong, Corinne S., 2278 Ontiveros, Hernesto, 4965 Oplinger, Edward S., 2630 Orduz, S., 3910 Oremland, Ronald S., 2899, 4357 Oremland, R. S., 4629 Orikoshi, Hidevuki, 472 Orlova, Margarita V., 2723 Orrego, Cristián, 3066 Ortega, Ynes R., 2284 Ortega-Calvo, Jose-Julio, 3123 Ortiz, Anabel, 4965 Ortiz, Miriam, 4965 Osano, Kaoru, 4073 Osmanagaoglu, Ozlem, 1997 O'Sullivan, Dan, 1673 O'Sullivan, David, 4618 Oude Elferink, Stefanie J. W. H., 2301 Oudega, Bauke, 392 Ouichanpagdee, Pornpimol, 5008 Ouinten, Mohamed, 633 Ouwerkerk, Diane, 1796 Overmann, Jörg, 1890, 4513 Øvreås, Lise, 2739 Oyofo, Buhari A., 363 Ozaki, Akiyoshi, 492 Ozaki, Katsuya, 3282

Pace, Norman R., 3110, 3869 Pack, Alexander, 1825 Packard, Ted T., 4958 Pag, Ulrike, 3140 Pagán, R., 465 Pagano, Marcela, 3520 Pagnocca, Fernando Carlos, 4820 Paice, Michael G., 2273
Paiva, Edilson, 3860
Pak, K.-R., 1013, 1987
Palojārvi, Ansa, 613
Palva, Airi, 1831
Pan, Guangliang, 4452
Panikov, Nicolai S., 922
Panke, Sven, 748, 2032
Paolozzi, Luciano, 4053
Paplomatas, E. J., 3846
Papoutsakis, Eleftherios T., 1079

Papoutsakis, Eleftherios T., Paquet, L., 2200 Park, Danny J., 4060 Park, Gwi Gun, 4489 Park, Hyun-Woo, 3932 Park, Yong-II, 273 Parker, D. L., 1545 Parra, Gregory, 948 Parriche, Martine, 3202 Parsons, Sarah J., 3707 Parthuisot, N., 2697 Parthuisot, Nathalie, 1725 Pasamontes, Luis, 4446 Pasanen, Anna-Liisa, 2914 Pasanen, Pertti, 2914 Pasteau, S., 1640 Paszko-Kolva, C., 3389 Patel, Bharat K. C., 1796 Pattinson, Sarah N., 2533 Paul, Eldor A., 3584 Paul, John H., 535, 2308, 2780 Paulsrud, Per, 310 Payne, G. A., 3713 Pazirandeh, Mehran, 4068 Peacey, Mick, 1169 Pedersen, Hans Christian, 3563 Peel, Michelle, 1940 Peitzsch, Nicola, 453 Pélandakis, M., 955 Pélandakis, Michel, 2977 Pell, Alice N., 3824 Peltola, J., 4767 Peltonen, Karita, 515 Pelz, Oliver, 4202 Peña, Guadalupe, 4965 Peñas, María M., 4028 Peng, Xue, 2520 Pennanen, Taina, 2173 Pepper, Ian L., 333, 3332 Peréz, Francisco, 5039 Pérez, J., 2726 Pérez, Pablo F., 21 Pérez-González, José A., 1412 Pernin, P., 955 Pernin, Pierre, 2977 Pernthaler, Jakob, 4299 Peruski, Leonard F., 363 Petersen, Andreas, 3499 Petruzzelli, Sabrina, 1161 Pfizenmaier, Klaus, 4862 Phebus, R. K., 3389 Phillips, Carol J., 2958 Phillips, Donald A., 3954 Phister, Trevor G., 1541 Piceno, Yvette M., 4276 Piché, Yves, 5004 Pichereau, Vianney, 1420

Pickard, Michael A., 2020

Pickup, Roger W., 3674

Pieper, Dietmar, 3305

Pierard, Denis, 4134

Pillai, Suresh D., 405

Pina, Sonia, 3376, 4485 Piñar, Guadalupe, 2970, 5016 Pintó, Rosa M., 2392 Pisabarro, Agustín, 1276 Pisabarro, Antonio G., 4028 Piskur, Jure, 3887 Pitkin, John W., 1497 Pitts, Keith, 1328 Pizzirani-Kleiner, Aline A., 1924 Platt, H. W., 3846

Pocard, Jean-Alain, 1420 Poelarends, Gerrit J., 2931 Pollard, John R., 4093 Polz, Martin F., 1715, 3724 Pommerening-Röser, Andreas, 3042 Pompei, Raffaello, 1161

Pond, David W., 370 Ponelle, Monique, 714 Poon, Alison, 4757 Porter, D., 1490 Postma, Pieter W., 4720 Pothuluri, Jairaj V., 3106 Potrawfke, Thomas, 3798 Poulsen, Lars Kongsbak, 2240 Poupin, P., 153, 159 Pouwels, Peter H., 4720 Powelson, M., 3846 Poyton, Robert O., 1040 Pratten, J., 3515 Prescott, Annette M., 4658 Presser, K. A., 1773 Prestidge, Ron A., 601 Preston, C. M., 2585 Prévost, H., 1594

Priemé, Anders, 1143 Prinčič, Alenka, 3584 Prins, Gjalt T., 208 Proctor, A., 4403 Pronk, Jack T., 1303, 2133, 4226 Prosser, James I., 2958

Psenner, R., 688
Psenner, Roland, 4299
Pueppke, Steven G., 4930
Pühler, Alfred, 3520
Puig, Montserrat, 3376
Pujalte, María Jesús, 3403
Pulliam Holoman, Tracey R., 3359

Pulvermacher, Kristie L., 4683 Purcell, Robert H., 4485 Puzstai-Carey, Marianne, 4782 Pyle, Barry H., 4658

Qi, FengXia, 2335 Qiu, Ji, 4891 Quax, Wim J., 2644 Quinn, Frederick, 2256 Quinn, John P., 356, 2291 Quintero, Ernesto J., 1246 Quintero, Rodolfo, 4965

Raangs, Gerwin C., 3336 Rachel, Reinhard, 3576 Rademaker, Jan L. W., 2096 Rådström, Peter, 3748 Radu, Son, 1153 Rai, L. C., 1545 Rai, P. K., 1545 Rainey, F. A., 4767 Rajagopal, B. S., 1805 Rajamohan, F., 756 Ralph, John, 3429 Ramírez, Lucía, 4028 Ramírez, Manuel, 5039 Ramón, Daniel, 1412 Ramos, Cayo, 2072, 4904 Ramos, Juan L., 38, 2072, 2970, 4904, 5016 Ramos, Juan Luis, 721 Ramsing, Niels B., 2943 Rand, Timothy A., 1006 Randolph, Sarah E., 1169 Rangger, Andrea, 613 Rantanen, Terhi, 1831 Raphel, Danielle, 1576 Rappé, Michael S., 294, 4522 Raskin, Lutgarde, 2503 Rasmussen, Mark A., 1975 Rasmussen, Ulla, 265 Raso, J., 465 Ratajczak, Andreas, 896, 1175 Ratkowsky, D. A., 1773 Ravagnani, Adriana, 1780 Ravatn, Roald, 2126 Ravel, Jacques, 3383 Ray, Bibek, 14, 1997 Read, Susan, 4210 Reardon, Kenneth F., 4994 Reddy, C. A., 651 Redkar, Rajendra J., 2229 Reeslev, Morten, 613 Reezal, Abdul, 4643 Reganold, John P., 4062 Regodón, José A., 5039 Reichardt, Wolfgang, 864 Reid, Gregor, 2418 Reid, Ian D., 2117, 2273 Reid, Julian R., 588 Reidl, Joachim, 4697 Reilly, K., 907 Remaud-Simeon, M., 1298 Remaud-Simeon, Magali, 1644 Remaut, Erik, 342 Rémy, Roland, 4446 Ren, Tie, 2397 Renault, P., 2721 Renganathan, V., 2748 Renner, Michael J., 43, 1919 Reponen, T. A., 3807, 4410 Rettig, Wolfgang J., 4862 Reubel, Gerhard H., 2888 Reuhs, Bradley L., 4930 Reuter, Gerhard, 1825 Reverte, Augustin, 1644 Revsbech, Niels Peter, 864, 3264 Rey, Michael W., 4423 Rghei, Nezar, 133 Rhee, S.-K., 1947 Rhee, Sung-Keun, 2327 Rhodes, A. N., 651, 1620 Rialland, Delphine, 4093 Riba, Guy, 88 Ribot, W. J., 982 Riccillo, Pablo M., 3520 Rich, Jeremy J., 4939 Richard, Jean, 1991 Richards, S. R., 520

Richter, Dania, 1980, 3089,

Rietjens, Ivonne M. C. M.,

4596

Ricke, S. C., 3458

Rieland, Brenda, 575

Rijpkema, Sjoerd G. T., 1169 Rikihisa, Yasuko, 2888 Rinker, Dan, 133 Riou, Christine, 3607 Riov, J., 5030 Rippey, Scott R., 5027 Rippmann, Jörg F., 4862 Ristaino, Jean B., 948 Ritieni, A., 3084 Ritieni, Alberto, 3923 Rius, Núria, 1344 Rivera, Francisco, 4990 Rivilla, Rafael, 1024 Roberts, Donald, 709 Roberts, Mary F., 2609 Roberts, P. D., 3961 Roberts, Robert F., 659 Robertson, Betsy R., 4467 Robertson, B. R., 3900 Robinson, Joseph A., 3429 Robinson, M., 5030 Robleto, Eduardo A., 1657, 2630, 5020 Rode, Ulrike, 3114 Roden, Eric E., 1504, 5046 Rodríguez, Ana, 3512 Rodríguez, Juan M., 818, 4536 Rodriguez-Maroto, Jose M., Roeßler, Markus, 3813 Rogerie, F., 1640 Rogers, Julia D., 4994 Rogers, Nicola, 3195 Rohr, Ute, 1822 Rollins, Jeffrey A., 2539 Rombouts, Frank M., 1059, 3917 Roncero, M. Isabel G., 1967 Ronchel, María-Carmen, 2072 Ronchel, M. Carmen, 4904 Rontani, Jean-Francois, 1576 Roque, Ana, 2318 Rosado, Alexandre S., 2770, 4950 Rosado, Alexandre Soares, 3860 Rosazza, John P. N., 3972 Rosenberg, E., 1379 Roslev, Peter, 4711 Ross, R. P., 2192, 2287 Ross, R. Paul, 439, 4618 Ross, T., 1773 Ross, William H., 4416 Rosselló-Mora, Ramon, 2691 Rouby, Y., 955 Rouse, D. I., 3846

Rousset, Marc, 1308

Rowan, Neil J., 2065

Rowe, R. C., 3846

Roy, Ken L., 4757

Roy, Sylvie O., 4958

Rubio, Jose M., 1024

Rudi, Knut. 34, 2639

Rudolph, Klaus, 3180

Russell, James B., 976

Rusul, Gulam, 1153

Russell, Sterling A., 1372

Ryan, Maire P., 439, 2287

Ruby, Edward G., 805, 3209

Ruiz-Barba, José L., 4883

Ruiz-Barba, José Luis, 1871

Ruíz-Roldan, M. Carmen, 1967

Rowe, Michael T., 3153

Ryan, Rebecca L., 4068 Rytter, Russell, 2262 Rzetskaya, Magarita, 2624

Sabarth, Nicolas, 2454 Sachslehner, Alois, 594 Sá-Correia, Isabel, 779 Saddler, John N., 2374 Sadowsky, Michael J., 178, Saeki, Katsuhisa, 3282 Sagt, C. M. J., 316 Saha, Badal C., 216 Sahagún-Ruiz, Alfredo, 3099 Sahl, Hans-Georg, 3140, 4803 Sahm, Hermann, 4283 Sahm, Kerstin, 4650 Saida, H., 742 Sailer, Miloslav, 4757 Saini, Hargurdeep S., 2831 Saito, Hiroaki, 479 Saito, Koki, 4340 Saito, Noriko, 1532 Saito, Toshiko, 1226, 2676 Saiz-Jimenez, Cesareo, 3123 Sakai, Kenji, 3397 Sakamoto, Toshio, 2361 Sakano, Y., 4877 Sakka, Kazuo, 411 Sala, F. J., 465 Salkinoja-Salonen, M., 1338 Salkinoja-Salonen, M. S., 4767 Salmon, Jean-Michel, 3607, 3831 Sancelme, M., 153, 159 Sanchez-Romero, Juan M., 4040, 748 Sand, Wolfgang, 2743 Sande, Eve S., 3954 Sandermann, Heinrich, Jr., 3305 Sandmann, Gerhard, 1972 Sanglard, Dominique, 3784 Sanglier, Jean-Jacques, 714 Sankey, Bruce M., 4363

Santo Domingo, Jorge W., 752 Santos, Helena, 3591 Sanz, Yolanda, 2313 Sarabia, Sergio, 4965 Sarais, Ileana, 1075 Sargeant, J. M., 3389 Sargent, John R., 370 Särkilahti, Laura K., 4084 Saro, Onorio, 1075 Sarthy, A. V., 793 Sasson, Caleb, 4357 Sato, Takuichi, 795 Saunders, Jon R., 3674 Savage, Dwayne C., 4180 Saxena, Deepti, 2831 Sayler, Gary S., 3422, 3698, 4180, 5023, 5049 Sayler, G. S., 2730 Sbrana, Cristiana, 3473 Schaefer, Daniel M., 3429 Schaefer, J. K., 4629 Schäfer, Annett, 2215

Schaffner, Donald W., 4416

Schamber, Robin, 14, 1997

Sano, Hiroshi, 3641

Santamaría, Mónica, 902

Santegoeds, Cecilia M., 3731,

Schardl, Christopher L., 601 Schauer, Frieder, 2215 Scheibner, Katrin, 399 Schell, Mark A., 3939 Schell, Ursula, 3290 Schembri, Mark A., 1628 Scherer, Siegfried, 2207, 3525 Schets, F. M., 4460 Schiffrin, D. J., 3690 Schimel, Joshua P., 4291 Schimmel, Timothy G., 3707 Schink, Bernhard, 2232, 4507 Schinkel, Thomas W., 1980, 3089 Schleifer, Karl-Heinz, 930, 2686, 3042

3089 Schleifer, Karl-Heinz, 930, 2686, 3042 Schleper, Christa, 1133 Schlömann, Michael, 3290 Schlör, Stefan, 4697 Schmid, Andreas, 2032 Schmid, Markus, 3042 Schmid, Rolf D., 3878 Schmidt, Thomas M., 3791, 4333, 4467 Schmidt-Dannert, Claudia, 3878 Schneegaß, Ivonne, 399

Schneider, Palle, 1601 Schneider, Silke, 3784 Schnell, S., 253 Schoisswohl, Doris, 3202 Schopp, C., 793 Schraa, Gosse, 2350 Schrader, Holly S., 575 Schramm, Andreas, 3480 Schrempf, Hildgund, 3383 Schröder, Imke, 3004 Schröder, Thomas J., 2350 Schuhmacher, Frank, 760 Schupp, James M., 1006 Schut, Frits, 3336 Schütt, Christian, 4128 Schwan, Rosane Freitas, 1477 Schwartz, Ira, 4663

Schwartzbrod, L., 4307 Schwartzbrod, Louis, 3118 Schwieger, Frank, 4870 Schwippl, Ines, 4973 Scott, June R., 2763 Scott, Karen P., 3683 Scott, Tammy M., 1688

Scott-Craig, John S., 1497 Segonzac, Michel, 370 Seidler, Ramon J., 2545 Seiler, Herbert, 2207 Seki, H., 742 Sekiya, Tadashi, 555

Sekiya, Tadashi, 555 Seldin, Lucy, 2770, 3860 Selenka, Fidelis, 1822 Selifonov, Sergey A., 1447, 1884

1884 Semrau, Jeremy D., 1106 Seok, Chaok, 4796 Servin, Alain L., 4573 Sesma, Ane, 3948 Setlow, Barbara, 1958, 4109 Setlow, Peter, 1958, 4109 Shah, P. A., 4260 Shalapyonok, Alexi, 1066 Shalapyonok, Ludmila S., 1066

Shanmuganathan, Subo, 2681

Shallcross, J. A., 1313

Shanmugavelu, M., 756 Shao-Hua, Chang, 2237 Sharma, H. S. S., 5053 Sharman, Rachel L., 1323 Sharon, A., 5030 Sharpe, Anthony N., 366 Shaw, David S., 4007

Shen, J., 1669 Shen, Yin, 637 Shere, J. A., 1390 Sheridan, G. E. C., 1313 Sheweita, Salah, 1086

Shianna, Kevin V., 2262 Shiaris, Michael P., 2560 Shibuya, Hajime, 4489 Shimada, Hiroshi, 1226, 2676 Shimizu, Akira, 1680 Shimizu, Sakayu, 549 Shingleton, Justin T., 5049 Shiotani, Kayoko, 472

Shotali, Kayoko, 472 Shokeir, M. Omar, 2278 Shorter, Joanne H., 1864 Sibille, I., 197 Sicker, D., 2386 Siclet, F., 955

Siebeling, Ronald J., 4676 Sierra-Alvarez, Reyes, 2409 Sikkema, J., 1333 Silver, Simon, 5042 Simard, Ronald E., 4255 Sime-Ngando, T., 197

Simonet, Jean-Marc, 3416 Siñeriz, F., 3512 Singh, Mahavir, 1405 Singh, Narendra K., 2229 Sivonen, K., 4767 Skeie, Marianne, 3275

Skraly, Frank A., 98 Skulberg, Olav M., 2639 Slebe, Juan Carlos, 4378 Small, P. L. C., 3882 Smalla, Kornelia, 1220, 1550 Smelt, Jan P. P. M., 509 Smets, Barth F., 3300

Smirnova, Tatyana A., 2723 Smit, Eric, 880, 1210 Smit, Gerrit, 1950 Smith, Laurence H., 2044 Smith, M. R., 1333 Smith, Robert A., 1385

Smith, Tracy, 1328 Smolenski, Walter J., 3429 Snipes, K., 4533 Sobecky, Patricia A., 2822 Soberón, Mario, 4965

Soda, Kenji, 486, 1029 Sohn, J.-H., 1947 Song, H.-G., 4924 Sonoki, Tomonori, 836 Sørensen, Jan, 3563

Sorensen, Kevin N., 226 Sorenson, W. G., 3620 Sorongon, Maria L., 4079 Sowers, Kevin R., 1052, 2966, 3359

Spain, Jim C., 246, 446, 2479, 4185Spanier, Jonathan G., 2262Specht, Michael, 2215

Speksnijder, Arjen G. C. L., 3464 Spencer, B., 2200 Speranzini, Donna, 133 Spielman, Andrew, 1980, 3089, 4596

4596 Spiess, Tilmann, 446 Srinivasan, Keeran R., 4610 Stabler, Peter J., 4106 Stacey, Gary, 4180 Stahmann, K.-Peter, 4283 Stahr, H. M., 3923 Stålbrand, Henrik, 2374 Staley, J. T., 4703

Stall, R. E., 3961 Stams, Alfons J. M., 2301, 2350 Stanton, C., 2192 Stapleton, Raymond D., 3422,

4180 Stärk, Katharina D. C., 543 Stark, Peter C., 2463 Stecchini, Mara Lucia, 1075 Steele, James L., 3411, 4670

Steele, M., 2346 Steenackers, M., 3966 Steensma, H. Yde, 2133 Stehmeier, Lester G., 637 Steidler, Lothar, 342 Stein, Jeffery L., 3075 Stein, Lisa Y., 1514, 4098

Stein, Lisa Y., 1514, 4098 Steinert, Michael, 2256 Steinle, Patrick, 2566 Stephen, John R., 2958 Stephens, Sarah K., 1871

Stephens, Sarah K., 1871 Stephenson, Keith, 2875 Sterling, Charles R., 2284 Stern, Robert V., 1270

Sternberg, Claus, 721, 2240, 2247 Stetter, Karl O., 3576

Stettler, Rolf, 2566 Stevenson, Bradley S., 3791 Stewart, Gordon S. A. B., 1323, 3525

Stewart, Philip S., 1526, 4035 Stickler, David J., 3486 Stiles, Michael E., 4757 Stinear, Timothy, 1743 St. Leger, Raymond J., 709 Stoffels, Marion, 930 Stolz, Andreas, 2315, 3270 Stone, Barbara J., 3127

Stone, Barbara J., 3127 Stoner, Daphne L., 4555 Stoop, Johan M. H., 4689 Story, Robert, 3070 Straub, Kristina L., 4846 Stretton, Serina, 2554 Strömpl, C., 3014 Struthers, J. K., 3368 Stuart-Keil, K. G., 3633

Stucki, Gerhard, 2566 Studer, Alex, 1933 Sturbaum, Gregory D., 2284 Stürmeyer, Heike, 1890 Suárez, Ana M., 4536

Stubner, Stephan, 4983

Suárez, Juan E., 3512 Suárez, Teresa, 771 Suárez-Güemes, Francisco, 3099

Suberkropp, Keller, 607, 1522 Sudesh, Kumar, 3437 Sugio, Tsuyoshi, 4743 Sugita-Konishi, Yoshiko, 1532 Sugiyama, Katsumi, 2006

Sukura, Antti, 3998 Sulaiman, Irshad, 2736

Sumino, Tatsuo, 2528 Summers, Anne O., 1328 Summers, R. Scott, 2755 Sundin, George W., 3948 Sung, Nackmoon, 999 Sutherland, John B., 3106 Suttle, Curtis A., 346 Suwa, Yuichi, 2528 Suyama, Tetsushi, 5008 Suzuki, Katsuhisa, 411 Suzuki, Marcelino, 4522 Suzuki, Marcelino T., 294 Suzuki, Takeshi, 486 Suzuki, Yuji, 526 Svenning, Mette M., 265 Swaisgood, Harold E., 2490, 2497 Swarts, Henk J., 3225 Swartz, James R., 4891 Swings, J., 3966 Sygusch, Jurgen, 4428 Sylvestre, Michel, 4637 Szentirmai, Attila, 1188

Szewzyk, U., 2788

Szewzyk, Ulrich, 496

Tabashnik, Bruce E., 1385 Tachiki, Takashi, 2952 Tada, Kohji, 555 Tagg, John R., 4803 Taguchi, Seiichi, 492 Tailliez, Patrick, 3059 Tajima, Shigeyuki, 4073 Takada, Nobuhiro, 2705 Takade, Akemi, 3648 Takagi, Hiroshi, 1607 Takahashi, Akinori, 555 Takahashi, Eiichi, 4340 Takahashi, Eisaku, 4340 Takahashi, Hiroya, 890 Takaiwa, Mikio, 3282 Takase, Kazuma, 2513 Takeda, Yasuo, 2513 Takemoto, Jon Y., 226 Tal, Yossi, 813 Talbot, Guylaine, 4428 Talbot, Robert W., 1864 Tamaoka, Jin, 1510 Tamplin, Mark L., 2701 Tanaka, Atsuo, 4857 Tanaka, Shotaro, 3754 Tang, Yin, 1963 Tangney, Martin, 1612 Tani, Katsuji, 1536 Tanner, Michael A., 3110 Tans-Kersten, Julie, 4918 Tantaoui, Abdelaziz, 633 Tautvydas, Kes J., 1958 Tay, Stephen T.-L., 1715 Taylor, Lance T., 258 Taylor, L. T., 2585 Tchack, Laurie, 4477 Tchernajenko, Vladimir, 2357 Tchorzewski, Marek, 1029 Tebbe, Christoph C., 2652, 2660, 4870 Tebo, Bradley M., 1123, 3549 Techkarnjanaruk, Somkiet, 2554

Telegdi, Judit, 2743

Téllez, Carlos M., 1115

Temp, Ulrike, 1548, 1766 ten Hagen, C. M., 392 Teramoto, Maki, 4396 Termorshuizen, A. J., 3846 Ternan, Nigel G., 2291 ter Schure, Eelko G., 1303 Teske, Andreas, 2943 Teunis, P. F. M., 4460 Teunissen, Pauline J. M., 830 Thaler, Jacques-Olivier, 2367 Thamdrup, Bo, 119 Tharpe, Wendy, 3939 Then Bergh, Katharina, 843 Thiboutot, S., 2200 Thierry, Dominique, 2743 Thiéry, I., 3910 Thimm, Torsten, 2652, 2660 Thomas, Catherine E., 2634 Thomas, Russell A. P., 1319 Thompson, Shawn S., 304 Thompson, Thomas L., 575 Thonney, Michael L., 3824 Thornton, Charles G., 3099 Thyme, Jesper B., 4711 Tichi, Mary A., 4703 Tiedje, James M., 922, 1283, 3584, 4089 Tiedje, J. M., 651, 752, 1620 Tien, Ming, 2624 Tilsala-Timisjärvi, Anu, 4816 Timmermann, Gabriele, 3042 Timmis, Kenneth N., 185 Timmis, Kenneth Nigel, 3798 Ting, Rebecca S., 279 Tochikura, Tatsurokuro, 2952 Tohda, Hideki, 555 Tokiwa, Yutaka, 5008 Toldrá, Fidel, 2313 Toledo, Héctor, 2380 Tolle, Charles R., 4555 Tomiyama, Masamitsu, 3983 Tomoyasu, Takahiro, 376 Toonen, Marjolein, 4736 Toren, A., 1379 Torres, Antonio, 1242 Torres Martinez, Claudia L., 3195 Torsvik, Vigdis, 2739 Toukdarian, Aresa, 2822 Traber, Hubert, 1194 Traore, Ousmane, 3118 Tremblay, Josselvne, 3059 Triplett, Eric W., 1657, 2630, 5020 Tropia, Maria José M., 564 Trout, Carol L., 948 Trout, James M., 1070, 2736 Truffaut, N., 153, 159 Tryland, I., 1018 Tsai, Ying-Chieh, 5012 Tsao, C.-W., 4924 Tsror, L., 3846 Tsuchiya, Noriaki, 3765 Tsujibo, Hiroshi, 472, 2920 Tuchman, Mendel, 1805 Tuor, U., 4260 Turner, Glenn W., 279 Twigt, Marja, 1950

Ueda, Mitsuyoshi, 4857 Ueda, Yoko, 992 Uemura, Takaaki, 3282 Ulitzur, Shimon, 4346

Tynkkynen, Soile, 1831

Tzipori, Saul, 4477

Ullrich, Matthias S., 3180 Umeda, Junko, 472 Unterholzner, Stefanie, 4299 Urbach, Ena, 3075 Urbain, Vincent, 2266 Urbance, John W., 3507 Urbance, J. W., 651 Urzúa, Ulises, 68 Uyttendaele, M., 1640

Vagner, Odile, 1454 Vaitilingom, Marc, 1157 Valdés, Carmen, 2836 Valdivia, E., 4623 Vallier, Marie-Jose, 3607 Vallim, Marcelo A., 1924 van Belkum, Marco J., 4757 van Berkel, Willem J. H., 1256 Van Beuningen, A. R., 4546 Vancanneyt, M., 3014 Vandamme, P., 3313 Vandamme, Peter A. R., 3998 van de Bunt, Bert, 1950 Vanden Boom, Thomas J., 1580 van den Broek, Peter, 4809 van den Hondel, C. A. M. J. J., 2794 van den Wijngaard, Arjan J., 2800 van der Aart, Quirina J. M., 2133 Van Der Knaap, Esther, 385 van der Maarel, Marc J. E. C., 2894 van der Meer, Jan Roelof, 2126, 4185 Van Der Pyl, D., 800 van der Vaart, J. M., 4047 van der Wal, Fimme J., 392 van Dijken, Johannes P., 1303, 2133, 4226 Van Dort, Heidi, 1786 Van Dort, Heidi M., 940 Van Eekert, Miriam H. A., 2350 van Elsas, Jan Dirk, 880, 1210, 2770, 2931, 3860, 4950 van Gemeren, I. A., 2794 Van Gemert, Ellis, 4142 Vanhala, Pekka, 2173 Van Hoek, Pim, 2133, 4226 van Hylckama Vlieg, Johan E. T., 2800 Van Kerkhove, E., 1563 van Knapen, F., 5033 Van Lis, Robert, 871 van Loon, Adolphus P. G. M., 4446 Vannelli, Todd, 1933 van Niel, Ed W. J., 1034 Van Niel, E. W. J., 2925 van Peij, Noël N. M. E., 1412, 3615 Van Rie, J., 1563 van Rijn, Jaap, 813 van Schie, Paula M., 2432 van Veen, Johannes A., 4950 van Zijderveld, F. G., 5033 Vara, J. M. Melero, 3846 Varde, Shobha, 4663

Varela, Patricia, 4990

Varga, Istvan, 1454

Vargas, Carmen, 4095 Varmanen, Pekka, 1831 Varner, Ruth K., 1864 Vazquez, Francisco, 3188 Vázquez-Garcidueñas, Soledad, Veal, D. A., 1669 Veazey, J. E., 1459 Vedamuthu, Ebenezer R., 4748 Vederas, John C., 4757 Velázquez, Encarna, 1555 Venema, Gerard, 4736 Venkataraman, Chandrasekar, 126, 3127, 3134 Venkatesan, M. Indira, 2596 Venkateswaran, Kasthuri, 681 Ventosa, Antonio, 4095 Venturi, Vittorio, 789 Vera, Jorge, 4378 Verachtert, Hubert, 3270 Vera Cruz, Casiana M., 1663 Vereecken, Karen, 3270 Vergin, Kevin L., 294, 3075 Verhagen, Frank J. M., 3225 Verheul, Annette, 1059 Verkleij, A. J., 316 Verrips, C. T., 316, 2794, 4047 Verrips, C. Theo, 1303 Verstraete, Willy, 4500 Vervoort, Jacques, 1256 Véry, Anne-Aliénor, 1569 Veschambre, H., 153, 159 Vester, Flemming, 1700 Veyrat, A., 1594 Viaene, Jasmine, 342 Vian, Alejandro, 2187 Viaud, Muriel, 88 Vicuña, Rafael, 68 Viegas, Cristina A., 779 Vieille, Claire, 2357 Vielotte, Natasha, 3195 Vierheilig, Horst, 5004 Vignon, M., 1298 Vijaranakul, Uriwan, 763 Vilich, V., 2386 Villalobo, Eduardo, 1242 Villalobos, Francisco J., 4965 Villemur, R., 4603 Vincenzini, Massimo, 1130 Vinopal, Robert T., 3300 Vinuesa, Pablo, 2096 Virta, Marko, 515 Vis, Eric H., 2853 Visser, Jaap, 3615 Volgyi, Antonia, 1188 Vollmer, Amy C., 3927 Vollmer, Martin Dominik, 3290 von Herbay, Axel, 760 von Stetten, Felix, 3525 von Wintzingerode, Friedrich, 2814 Voordouw, Gerrit, 53, 637, 2882 Voordouw, Johanna K., 2882 Vorbeck, Claudia, 246 Vredevoe, Larisa K., 2888 Vriezen, J. A. C., 3954 Vugman, Ney V., 3195

Wachtendorf, Ute, 1220 Wackett, Lawrence P., 178, 2323 Wade, William G., 795

Vuilleumier, Stéphane, 1194

xi

Wagner, Michael, 3042, 3480, Wagner-Döbler, I., 3014 Wagnon, Christina A., 669 Wai, Sun Nyunt, 3648 Wakai, Yoshinori, 4076 Wakao, Norio, 411 Wakayama, Mamoru, 3397 Wakeham, Stuart G., 1133 Wakisaka, Shinji, 2952 Walker, Graham C., 4600 Walker, Mark J., 2281 Walker, Nicola D., 2836 Walker, Shirley A., 1147, 4748 Wallace, R. John, 2836 Wallner, Günter, 4973 Walter, Michael F., 4439 Walton, Jonathan D., 385, 1497 Walton, William E., 4174 Wang, Chang-Ning, 4210 Wang, Haipeng, 2705 Wang, Henry Y., 4610 Wang, Hua, 1673 Wang, Jichun, 2705 Wang, Shengun, 3620 Wang, Sookyun, 405 Wang, Ying, 714 Wanner, Gerhard, 3576 Ward, Owen P., 2020 Warner, Jennifer M., 3025 Warner, Philip J., 1871 Warren, R. Anthony J., 2374 Wasfy, Momtaz O., 363 Wassenaar, Trudy M., 1816 Wasserman, Evgeny, 2295 Watanabe, Kazuya, 1203, 4396 Waterman, Scott R., 3882 Watkins, William D., 5027 Watrud, Lidia S., 2545 Watson, Kenneth, 3063 Watts, Richard J., 3759 Weber, Susanne, 1822 Webster, John M., 3214 Wehrman, Thomas S., 1650 Wei, Cheng-i, 2701 Wei, Xueming, 1708 Wei, Yau-Huei, 5012 Weickert, Michael J., 1589 Weightman, Andrew J., 795 Weimer, Bart, 3320, 3327 Weinbauer, Markus G., 431, 3776, 5000 Weiner, Jonathan M., 775, 1937 Weiner, Ronald M., 1246, 2906 Welker, Neil E., 1079

Welling, Gjalt W., 3336 Wellington, Elizabeth M. H., Wells, Bridget M., 4068 Werlen, Christoph, 4185 Werner, Dietrich, 2096 Wessels, Joseph G. H., 4028 Westpheling, Janet, 4217 Whipps, John M., 2634 White, Elizabeth, 2256 Whitton, Brian A., 2533 Whyte, Lyle G., 2578 Wichels, Antje, 4128 Wicklow, Donald T., 4482 Widmer, Franco, 2545 Widmer, Giovanni, 4477 Wiegel, J., 352 Wiener, Pamela, 5061 Wieser, Marco, 4743 Wietzes, Pieter, 208 Wigley, Peter J., 4060 Wijnberg, Joannes B. P. A., Wikner, Johan, 3246 Wilcox, Lee W., 4384 Wilderer, Peter A., 4115 Wilhelm, Michael, 1822 Wilimzig, Markus, 4530 Wilkens, Marga, 2931 Wilkins, Jon F., 1006 Wilkinson, Heather H., 601 Willardson, Barry M., 1006 Willeke, K., 3807, 4410 Willemot, René-Marc, 1644 Willemot, R. M., 1298 Willems, Hermann, 4234 Willi, Laurent, 1194 Williams, H. G., 1091 Willis, Laura B., 4600 Wilson, M., 3503, 3515 Wilson, William H., 2051 Wingard, Christopher E., 3893 Wingfield, M. J., 2094 Winkler, Reinhard, 3305 Wirsen, C. O., 4057 Wirth, Margaret C., 4174 Wirth, Reinhard, 626 Wischnak, Catrin, 3507 Witholt, Bernard, 2032, 3784 Witt, Susanne, 1405 Witt, Valerie F., 1871 Witte, Angela, 4904 Witthuhn, Doris, 581 Wittich, Rolf-Michael, 3798 Witzel, Karl-Paul, 3769

Wohlleben, Wolfgang, 3878 Wojtasiak, Michelle L., 1657 Wolfe, Ralph S., 768 Wolff, Barbara, 714 Wolterink, Arthur, 871 Wolters, Anneke, 1210 Wolters, Anneke C., 880 Wong, Cheryl, 3496 Wong, Ken K. Y., 1759 Wong, Sui-Lam, 824 Wood, Jacqueline, 3683 Wood, Thomas K., 112, 3023 Woodward, D., 2346 Woolston, Tina K., 3824 Wouters, Jeroen A., 3917 Wouters, Patrick C., 509 Wright, Alice, 4089 Wu, K., 2585 Wu, Kai Yuan, 4210 Wu, Qingzhong, 1052 Wu, Xu-Chu, 824 Wubbolts, Marcel G., 2032, 3784 Wuertz, Stefan, 4115 Wulff, Brande B. H., 1024 Wullings, B. A., 4546 Wuytack, Elke Y., 3220 Wyndham, R. Campbell, 1940 Wyss, Markus, 4446

Xia, Fuhu, 4035 Xia, Qun, 2869 Xiang, Jim, 2869 Xiao, Jian-Ping, 3669 Xiao, Rong, 1472 Xiong, Anming, 763 Xu, Karen D., 1526, 4035 Xu, Renlin, 4210 Xu, Shuang-Yong, 3669 Xun, Luying, 2086

Wyss, Urs, 5004

Yabe, Kimiko, 166 Yabuta, Masayuki, 526 Yacubovich, Victoria Y., 2723 Yamada, Akihiro, 2006 Yamada, Hideaki, 549 Yamamoto, Hiroyuki, 1680 Yamamoto, Nagi, 4076 Yamamoto, Satoshi, 1203 Yamashiro, C. T., 3389 Yamato, Ichiro, 2513 Yanagi, Hideki, 1694 Yanagihara, Yasutake, 2705 Yanagiuchi, Toshiyasu, 4076 Yang, Junbao, 2869 Yano, Yutaka, 479 Yao, Wen-Hsiang, 3698 Yates, Marylynn V., 304 Yavitt, J. B., 172 Ye, Ruigiong, 824 Yee, Arlene, 4210 Yee, Dennis C., 112 Yernool, Dinesh A., 4774 Yoch, D. C., 1484 Yoch, Duane C., 106 Yokota, Akira, 3397 Yokoyama, Kengo, 555 Yong, Ping, 4607 Yoshida, Shigeki, 4489 Yoshida, Shin-Ichi, 3648 Yoshida, Tovokazu, 4743 Youga, H., 651 Young, J. Peter W., 419 Young, L. Y., 1650, 2432 Young, Michael, 1780 Youngman, Phil, 2995 Ytow, N., 742 Yu, Jiujiang, 4834 Yu, Weizhu, 1673 Yura, Takashi, 1694 Yurkov, Vladimir, 337

Zani, Sabino, 3444 Zapanta, Laura Schick, 2624 Zaritsky, Arieh, 1750 Zehnder, A. J. B., 2925 Zehnder, Alexander J. B., 1264, 2126 Zehr, Jonathan P., 3444 Zeida, Mitsuhiro, 4743 Zeikus, J. Gregory, 2357 Zerhari, Karim, 4912 Zhang, H., 4047 Zhang, Jun Kai, 768 Zhong, Wei, 2418 Zhou, E., 2200 Zhou, Edward, 2578 Zhou, Yihong, 3620 Ziebell, Kim, 4134 Ziegler, Gregory R., 659 Zinder, Stephen H., 1270, 3824 Zlotkin, Amir, 4065 Zoetendal, Erwin G., 3854 Zorrilla, Irene, 4269 Zumft, Walter G., 3092 Zuo-Hu, Li, 2237 Zwaagstra, K. A., 5033 Zwart, Gabriel, 3464 Zylstra, Gerben J., 2710

SUBJECT INDEX

VOLUME 64

ABC systems field release assays, 2072 fluorescent pseudomonads, 4904 ABC transporters P. digitatum drug resistance, 3983 AbiQ abortive infection mechanism, 4748 Abortive infection AbiQ from L. lactis, 4748 Acacia spp. diversity of rhizobia, 4912 Acanthamoeba polyphaga coculture with M. avium, 2256 Acanthamoeba vesicles L. pneumophila viability, 279 Acenaphthene degradation 13C NMR study, 1447

Acetate
oxidation by G. sulfurreducens, 2232
oxidation kinetics, 2301
syntrophic oxidation, 2232
Acetate detoxification

Acetate detoxification E. coli, 1079 Acetic acid

S. cerevisiae pH_i, 530 transport in S. cerevisiae, 665

Acetitomaculum ruminis reductive acetogenesis, 3429 Acetoacetyl coenzyme A reductase PHB synthesis, 2859

Acetobacter spp. phosphate starvation, 896 ppk transcription, 896

Acetone production by *E. coli*, 1079 Acetyl xylan esterase

B. pumilus, 789
Acid phosphatases
S. equisimilis, 2439
thermostability, 4446
Acid rain

soil microbial community effects, 2173 Acid stress

aromatic hydrocarbon degradation, 4180 enteric pathogen survival, 3883 L. lactis CitP induction, 850 S. typhimurium, 3458

Acidiphilium multivorum arsenic resistance operon, 411 Acidophilic methanotrophic comn

Acidophilic methanotrophic communities Sphagnum peat bogs, 922

Acid-sensitive enteric pathogens survival on food, 3883 Acinetobacter spp.

alkane degradation, 1175 antibiotic resistance, 3499 gene transfer from beets, 1550

Actinomycete spores analysis in the air, 4410 characteristics, 3807

Actinorhizal plants diversity of Frankia strains, 3539

Activated sludge anaerobic phosphate release, 2925 bacterial quinone profiles, 992 chlorocatechol degradation, 2126 horizontal gene transfer, 2126 nitrifying bacterium diversity, 3042 phenol-degrading bacteria, 4396 population dynamics, 1203 Active biological containment systems fluorescent pseudomonads, 4904

penicillin biosynthesis gene, 843 Acylated homoserine lactones urethral catheter biofilms, 3486

growth pressure and membrane lipids, 479
Adhesion

bacterial films, 3690 gliding bacteria in biofilm, 4079 Vibrio and coral bleaching, 1379 Adsorption

bacteriocins, 4403 virus transport through soil, 405 Aerobic α,ω-dichloroalkane degradation Pseudomomas spp., 3507

Aerobic anoxygenic photosynthetic bacteria deep-ocean hydrothermal vent, 337

Aerobic metabolism monoterpene effect, 520 nitroglycerin, 3300 Aerolysin

gene cloning, expression, 2473
Aeromonas salmonicida
oxytetracycline resistance, 4194

Aeromonas trota aerolysin gene cloning, 2473

Aflatoxin gene expression
A. parasiticus, 2275
Aflatoxins

Anatoxins
A. parasiticus, 4834
aflJ characterization, 3713
aflR regulation, 3718
biosynthesis, 166
critical amino acids, 4834

aftl aflatoxin biosynthesis, 3713

aflR aflatoxin biosynthesis, 3718

Agarase
Pseudoalteromonas isolate, 4378
Agaricus bisporus
Bsn-t alleles, 2105

metabolite effects, 5053 NADP-mannitol dehydrogenase, 4689 Agarolytic bacteria

identification, 4378 Agrobacterium radiobacter atrazine degradation, 3368

Agrobacterium tumefaciens root colonization by mutants, 2341

Agrocybe spp. interspecific variations of V4, V6, and V9 domains, 4149

Airborne microorganisms actinomycete spores, 3807, 4410 *M. hyopneumoniae*, 543 toxin from *S. griseus*, 4767 Air-water interface

N. ramosa, 1890 Air-water-solid interface bacteriophage sorption, 304 Alcaligenes eutrophus

Alcaligenes eutrophus chromate sensor, 453 Alcaligenes latus PHA synthesis gene cloning, 4897 P. stipitis, 1350
Alcoholic fermentation
glutamine production, 2952
S. cerevisiae, 2133
S. cerevisiae and acetic acid, 530
Alfalfa seeds

Alcohol dehydrogenase genes

canavanine effect on *B. cereus*, 4683 Algal blooms

algicidal bacteria, 2806 Alga-lysing bacterium genetic transformation, 2061 Algicidal bacteria effect on harmful blooms, 2806

Alginate matrix aphid biocontrol, 4260

Aliphatic compounds combustion by *N. frowardii*, 399 Aliphatic polyesters

phylogeny of degraders, 5008 Aliphatic-aromatic copolyesters degradation by *T. fusca*, 1731

Alkaline phosphatase expression biofilms, 1526

Alkaline xylanases thermostable enzymes, 3533 Alkaliphilic *Bacillus* spp.

thermostable alkaline xylanases, 3533 Alkalophiles

Bacillus α-amylase, 3282 buffering capacity, 1344 membrane H⁺ conductance, 1344

Alkane hydroxylase degradation by *Acinetobacter* sp., 1175 Alkanols

acetic acid transport in S. cerevisiae, 665 alkM

Acinetobacter alkane degradation, 1175 Allergen of Japanese cedar pollen protein folding in E. coli, 1694 Allylthiourea

nitrifying bacterial activity estimation, 2266

α-Amylase alkaliphilic *Bacillus* isolate, 3282 *B. subtilis*, 2875

α-L-Arabinofuranosidase
A. pullulans, 216
Alteromonas spp.

chitinase C, 472 Aluminum oxide membrane filters bacterial enumeration, 5000

Amidase acyl transfer activity *Rhodococcus* strain, 2844 Amine fluorides

effect on S. sanguis, 3503 Amino acid fermentation Hexamita sp., 203

Amino acid sequence novel *Bacillus* α-amylase, 3282 Amino acids

L. lactis milk utilization, 1230 L. lactis requirements, 1991 overproduction by E. coli, 1607 penicillin biosynthesis, 843 synthesis by ruminal bacteria, 2836

Aminopeptidase P pepP characterization, 4591

Aminotransferase phenylalanine conversion, 3009
Ammonia
C. parvum cyst inactivation, 784
Ammonia monooxygenase inhibition in N. europaea, 4098
Ammonia-hyperproducing bacteria
New Zealand ruminants, 1796
Ammonia-oxidizing bacteria analysis by DGGE and probing, cosubstrate oxidation, 1372

Ammonia-oxidizing bacteria analysis by DGGE and probing, 2958 cosubstrate oxidation, 1372 eutrophic lakes, 3674 N. europaea, 1514 Ammonium

inhibition of CH₄ oxidation, 4291 removal by the OLAND system, 4500 Ammonium concentration nitrifier community structure, 3584

Ammonium limitation

N. europaea ammonia oxidation, 1514

Ammonium salt

mathema oxidation by M. trichesposium

methane oxidation by *M. trichosporium*, 253 Amoebae

hospital water systems, 1822 Legionella spp., 1688 N. fowleri genetic variation, 2977

Amplified fragment length polymorphism *P. syringae* pv. tomato diversity, 1180 α-Amylase

folding state assessment, 1163 Anaerobic bacteria

dichloromethane metabolism, 646 mercury methylation, demethylation in sediments, 1013

Anaerobic degradation 3,5-dichloro-p-anisyl alcohol, 3225 Anaerobic digester systems G. amarae quantification, 2503

Anaerobic granular sludge acetate oxidation kinetics, 2301

Anaerobic incubators

Methanosarcina spp., 768

Anaerobic microorganisms brominated biphenyl dehalogenation, 940 Anaerobic phosphate release nitric oxide in activated sludge, 2925

Anaerobic sludge TNT transformation, 2200

Ancient DNA preservation in sediment, 4513

Anguilla anguilla
V vulnificus heterogeneity 467

V. vulnificus heterogeneity, 4676 Animal wastes

bacteriophages, 5027 Anisyl alcohol oxidation novel cofactor, 830

Anomoneura mori intracellular symbiotic bacteria, 3599 Anoxic lake sediments

Hg methylation, demethylation, 1013 Anoxic rice paddy soil microcosms

methanogenic community, 960 Antarctic microbial assemblages C. perfringens distribution, 2596 seasonal, spatial variability, 2585

Antarctic water column manganese reduction, 3791

Anthrax vaccines, 982 Antibacterial agents anti-Listeria compounds, 800

class IIa bacteriocins, 3275 enterocin I, 4883 linenscin OC2, 3416

new two-peptide bacteriocins, 2269 pediocin PA-1, 5057

S. aureus, 4803 silver, 5042

sodium nitroprusside, 3195 Antibiotic production

B. cepacia BC11, 3939
E. herbicola Eh1087, 1837
Antibiotic resistance

Antibiotic resistance

Acinetobacter spp., 3499
enterococci in meat, 1825

Antibiotics effects on rhizosphere bacteria, 5020 sea grass metabolite, 1490 streptomycin, 5061

Antibodies

B. cereus spores, 2490, 2497
scFv expression in procaryotes, 4862

Antibotulinal bacteriocins brochocin-C from B. campestris, 4757 Antifungal agents

effects on AM fungi, 2304 H. fuscoatra, 4482 P. fluorescens, 3563

production by *B. cepacia*, 3939

Anti-Listeria compounds G. candidum, 800 Antiviral agents

rapid screening method, 1161

Aphids biocontrol, 4260 Apple juice

E. coli O157:H7 inactivation, 4533 Aquaria

Nitrospira-like bacteria, 258 Aquatic bacteria

blue nucleic acid dyes, 1725 Aquatic environments

bacteriophages from wastes, 5027 Campylobacter survival, 733 choline uptake, degradation, 1045 mercuric reductase expression, 695 natural bacterial population analysis, 742

Aquatic hyphomycetes temperature and sporulation, 1522 Aquifers

anaerobic benzene degradation, 775 microbial diversity, 3869 nanoflagellate predation on bacteria, 618

α-L-Arabinofuranosidases
A. awamori, 4021
C. xylanolytica, 43, 1919

Arbuscular mycorrhizal fungi antifungal *Pseudomonas* strain effects, 2304

individual symbiont survival, 3473 simple staining method, 5004

Archaea fish digestive tracts, 2894 high mountain lake, 4299 P. aerophilum and tungsten, 3004 rice roots, 4983

Arctic soil psychrotrophic PCB degraders, 4823 ARDRA Hawaiian soil bacteria, 1283 areA
A. oryzae N₂ metabolism, 3232
ArfI
C. xylanolytica, 43

arfI and arfII α-L-arabinofuranosidases, 1919

argA genes
E. coli arginine production, 1805

Arginine production genetically engineered *E. coli*, 1805

Aroclor 1260 dechlorination in sediment, 1052 dehalogenation, 1786

Aromatic compound hydrolase genes Rhodococcus sp., 2006 Aromatic compounds biodegradation, 930, 4180

combustion by N. frowardii, 399 Arsenic resistance operon A. multivorum, 411

Artemia franciscana nauplii
Vibrio bioencapsulation, 2318
Arxioozyma telluris

heat shock response, 3063 Aryl-alcohol oxidase wheat straw degradation, 325

wheat straw degradation, 325 AS-48

S. choleraesuis sensitization, 4623 Ashbya gossypii threonine aldolase, 4283

Aspartate deficiency
L. lactis subsp. lactis, 1673
Aspergillus aculeatus

Aspergillus aculeatus cell surface-engineered yeast, 4857

Aspergillus awamori α-L-arabinofuranosidases, 4021 cutinase variants, 2794

Aspergillus flavus mycoparasite, 4482 Aspergillus fumigatus thermostable phytase, 4446

Aspergillus nidulans gpdA promoter, 2229 penicillin biosynthesis gene, 843

penicillin biosynthesis gene, 84 xlnD gene, 1412 Aspergillus niger

thermostable acid phosphatase, 4446 thermostable phytase, 4446 XlnR-controlled gene expression, 3615 Aspergillus oryzae

areA and nitrogen metabolism, 3232 glucose-tolerant β-glucosidase, 3607 prolyl dipeptidyl peptidase, 4809

Aspergillus parasiticus aflatoxin biosynthesis, 4834 aflatoxin gene expression, 2275 O-methyltransferase I, 166 sterigmatocystin gene expression, 2275

Aspergillus terreus
butyrolactone I effect, 3707

Astaxanthin production by C. utilis, 1226

Astrovirus detection in mussels, 3118 Atmospheric isoprene

microbial consumption, 172 Atmospheric methane consumption by forest soils, 2397 oxidation in soil, 4291

Atrazine catabolism interspecies catabolism, 178

plasmid-encoded genes, 2323 soil bioremediation, 3368 att gene mutants A. tumefaciens root colonization, 2341

Attached bacteria

protozoan grazing, 1264

Attachment hyphomicrobia, 1246

L. pneumophila, 126 thiobacilli and pyrite, 2937

atzABC genes

Pseudomonas strain ADP plasmid, 2323

Aureobasidium pullulans α-L-arabinofuranosidase, 216 Australasian grasses

toxic endophytic fungi, 601

Autolysis

cheesemaking, 4142 L. lactis subsp. cremoris, 4142 Automated colony counting

COVASIAM, 1400

Automated fluorescent PCR Shiga toxin-producing E. coli detection, 4210

Azide

nitrifying bacterial activity estimation, 2266 2,2'-Azinobis(3-ethylbenzthiazoline-6-sulfo-

cation radical reduction, 2026

Bacillus anthracis

protective antigen, 982

Bacillus cereus

canavanine effect, 4683 emetic toxin detection, 1338 growth medium architecture effects, 1075

rapid DNA test, 1634 Bacillus cereus spores

single-chain antibody, 2490, 2497

Bacillus laterosporus insecticidal activity, 2723

Bacillus pumilus acetyl xylan esterase, 789

Bacillus sphaericus

Cyt1Ab1 expression, 3910 nontoxic mutant binary toxins, 756 PNP degradation pathway, 2479

Bacillus spp. Cu(II) adsorption, 1123 spore surface charge, 1123 thermostable alkaline xylanases, 3533 thermostable endochitinases, 3397 xanthan lyase, 3765

Bacillus stearothermophilus thermostable \u03b3-mannanase, 4428 Bacillus subtilis α-amylase production, 2875

base alkylation of spores, 1958 heat killing of spores, 4109 individual species detection, 4994 novel phytase, 2079 phenolic acid decarboxylase, 1466 plasmin-resistant streptokinase, 824 pressure and spore germination, 3220

Bacillus thuringiensis cry gene characterization, 4965 Cyt proteins and sheep blowfly larvae,

entomopathogenic potential, 4782 high-affinity Cry1A receptor in M. sexta, insecticidal crystal proteins, 1563, 4368 optimization of Cry3A yields, 3932 spores affect resistance in moths, 1385 toxin display by a phage, 2995

Bacillus thuringiensis subsp. israelensis T. pyriformis food vacuoles, 1750 Bacillus thuringiensis subsp. jegathesan Cry11B-resistant mosquitoes, 4174

Bacillus thuringiensis subsp. medellin Cyt1Ab1 expressed in B. sphaericus, 3910

Bacterial biosensors

response to ultrasound, 3927 toluene-based contaminants, 1006

Bacterial biovolume image analysis, 3246 Bacterial canker of fruit trees

P. syringae pv. syringae, 3818

Bacterial catalysts toluene transformation, 748

Bacterial cell dry mass determination, 688

Bacterial chromate sensors A. eutrophus, 453

Bacterial communities

habitat-based oligonucleotide probes, 185

Bacterial consortia

trichlorobenzene dechlorination, 496 Bacterial ecology

Legionella spp. in protozoa, 3127, 3134 Bacterial films

ellipsometric measurement, 3690

Bacterial genome analysis plasposons, 2710

Bacterial lysis flavor development in cheese, 1950

Bacterial morphology image analysis, 3246 Bacterial self-destruction

S. typhimurium, 1323 Bacterial species composition enrichment cultures, 5046

Bacterial wilt disease R. solanacearum, 4918

Bactericidal activity pediocin AcH, 1997

Bacteriocin release protein E. coli protein release, 392

Bacteriocins

adsorbents for concentration, 4403 AS-48, 4623

brochocin-C from B. campestris, 4757 class IIa, 3275

enterocin I, 4883

L. plantarum, 2269 lacticin 3147, 439, 2287

mastitis pathogen inhibition, 2287

mode of action, 439 pediocin PA-1, 818

pediocin PA-1 inhibition, 5057

plantaricin C, 3512

plantaricin S, 1871 S. choleraesuis sensitization, 4623

Bacteriolytic enzymes L. lactis subsp. cremoris, 4142

Bacteriophage sorption experiments role of air-water-solid interface, 304

Bacteriophages

animal wastes, 5027 B. thuringiensis toxin display, 2995 broad host range prevalence, 575

common elements in gene expression, 1147

diversity in the North Sea, 4128 E. coli O157:H7 phages in sewage, 2443

L. lactis, 4618

lactococci, 4255 temperate phage-host systems, 535

treated wastewater, 4307 V. vulnificus, 346

Bacterioplankton production control in a eutrophic lake, 431

Bacterium-based biosorbents E. coli and heavy metals, 4068 Bacterium-specific PCR primers

design and evaluation, 795 Bacteroides distasonis

persistence in river water, 4103 Bacteroides fragilis bacteriophages treated wastewater, 4307

Bacteroides spp.

restriction enzyme profiling, 3683

Baculoviruses

temperature and insect cell growth, 2237

Baker's yeast

fermentative capacity, 4226 glutamine production, 2952

Barophilic bacteria

Mariana Trench, 1510

pressure and lipid composition, 479

Base alkylation B. subtilis spores, 1958

Basidiomycetes laccases, 771

Batch culture

K. oxytoca nitrate removal, 2970 BAX for Screening/E. coli O157:H7

E. coli O157:H7 in ground beef, 4390

Reauveria bassiana somatic hybrids, 88

Beauveria sulfurescens somatic hybrids, 88

Beauvericin

Fusarium-contaminated feed, 3923 production by fusaria, 3084

Beef

E. coli O157:H7, 1153

Benzaldehyde

phenylalanine conversion, 3009

Benzene

degradation in sediments, 1937 freshwater sulfate-dependent oxidation,

metabolism in soil, 4924

Benzene, toluene, ethylbenzene, and xylene chromosomal reporter for sensing, 2730

Benzo[a]pyrene successive mineralization, 2853

Benzothiazoles

biodegradation, 3270

Benzoxazolinone allelochemicals detoxification by fungi, 2386

β-Carotene

production by C. utilis, 1226 β-Glucosidase

A. oryzae, 3607

P. chrysosporium, 2748 β-subgroup proteobacterial ammonia oxidiz-

analysis by DGGE and probing, 2958

β-Tubulin gene polymorphism C. parvum, 4477

β-Xylosidase A. nidulans xlnD gene, 1412 bga.4 molecular characterization, 2187 Bifidobacteria surface properties of human isolates, 21 Bioaugmentation phenol degraders in sludge, 1203 Biobleaching Bjerkandera spp., 2409 Biocatalyst engineering cytochrome P-450_{BM-3} monooxygenase, 3784 Biochemical reaction rate coefficients evaluation, 2044 Biocontrol aphids, 4260 beet armyworm, 4372 cottonwood leaf beetle, 4368 crown gall disease, 3977 damping-off fungus, 3939 insects, 2158, 4372, 4965 mosquitoes, 756, 3910, 4174 mosquitoes and blackflies, 1750 phytopathogenic fungi, 1442 S. exigua, 4372 soil-borne fungal plant pathogens, 2304 Bioconversion long-chain saturated fatty acids, 3784 Biodegradable plastics PHA synthase gene analysis, 3437 phylogeny of degraders, 5008 Biodegradation acenaphthene, 1447 alkanes, by an Acinetobacter sp., 1175 atrazine, 3368 benzene, 1937 benzothiazoles, 3270 biodegradable plastics, 5008 carbon tetrachloride, 2350 chlorobenzene, 4185 3-chlorobenzoate, 1620 choline in estuaries, 1045 copolyesters, 1731 creosote, 1447 diatrizoate, 3114 dibenzofuran, 2215 α,ω-dichloroalkane, 3507 dichloromethane, 1194 1,3-dichloropropene, 2931 di-(2-ethylhexyl)phthalate, 4711 emergent macrophyte litter, 607 fluorophenols, 1256 fossil fuel, 1447 hexadecan-2-one, 1576 individual species detection, 4994 iodinated X-ray contrast agents, 3114 metal-EDTA complexes, 1319 methane, 1106 morpholine, 153, 159 naphthalene, 4610 p-nitrophenol, 2479 4-nitrotoluene, 446 PCB metabolites, 4637 phenanthrene, 3123 phenol, 2424 phosphonomycin, 356

phthalate, 4711

4180, 4703

polyurethane, 62

polycyclic aromatic hydrocarbons, 359,

styrene, 2032 sulfonated azo compound, 2315 1,2,3,4-tetrachlorobenzene, 3798 TNT, 2864 toluene, 1715 trichloroethene, 2454 trichloroethylene, 1106, 3451, 4353, 5049 variable-chain-length alkanes, 2578 Biodesulfurization Rhodococcus strain X309, 4363 Bioencapsulation Vibrio spp., by brine shrimp, 2318 BioExpert bioleaching control system, 4555 Biofilms alkaline phosphatase expression, 1526 Campylobacter survival, 733 genetic diversity, 3464 gliding bacterium growth inhibition, 4079 Hyphomonas spp., 2906 in situ gene expression, 721 indwelling urethral catheters, 3486 new genetic trait establishment, 2247 O2 effect on spatial heterogeneity, 4035 plant surfaces, 4789 quantitative analysis, 4115 sulfate-reducing bacteria, 3731 teeth, 3515 TOL plasmid establishment, 2247 V. cholerae O1, 3648 Biofilters community structure changes, 4877 drinking water treatment, 2755 ethylene removal by bacteria, 4168 Biofouling antibiotic from sea grass, 1490 hyphomicrobia, 1246 Biohydrometallurgy metal extraction by thiobacilli, 1237 Bioleaching intelligent control system, 4555 T. ferrooxidans, 2743 Thiobacillus strains, 1237, 3570 BIOLOG GN method substrate utilization patterns, 1220 Biological containment systems field release assays, 2072 Bioluminescence complement-mediated killing, 515 V. fischeri and squid, 805 Bioluminescence assays nitrification inhibitors, 3656 Bioluminescent reporters BTEX sensing, 2730 PCB detection, 5023 Biomass determination small bacteria at low concentrations, 3900 Bioreactors bacterial community analysis, 2528 bacterial community dynamics, 930 microbiology, 1878 Bioremediation aquifers, 3869 atrazine-contaminated soil, 3368 fossil fuel wastes, 1447 heavy metal complexes, 1319 mercury-tainted aquatic habitats, 695 metal sorption, 1545 trichloroethylene, 112, 5049 Biosensors digestive tract bacteria, 2721

luciferase genes, 2721 toluene-based contaminants, 1006 Biosorption M. aeruginosa and metals, 1545 Biosynthesis aflatoxins, 3713, 3718, 4834 amino acids, 2836 antibiotic, by B. cepacia, 3939 antibiotics, 1837 cyclic β-(1,2)-glucan, 1290 dextran, 1644 glutamate, 2485 glycine betaine from choline, 4095 hemoglobin, 2220 indole-3-acetic acid, 5030 novel lantibiotic, 3140 oligosaccharides, 1644 penicillin, 843 polyhydroxyalkanoate, 4897 polyhydroxybutyrate, 2859 streptomycin, 5061 trichothecenes, 221 Biotypes Danish V. vulnificus, 7 Biotyping Campylobacter isolates, 2346 Biphasic thermal inactivation S. enteritidis, 459 Biphenyl-degrading microbial communities microcosm enrichment, 3014 Biphenyl-grown P. acidovorans DDE metabolism, 2141 Bird fecal droppings Giardia and Cryptosporidium, 2736 Bis(3,5-dichloro-4-hydroxyphenyl)methane formation, 3225 Bierkandera adusta industrial dye transfermation, 2788 Bjerkandera spp. benzo[a]pyrene mineralization, 2853 biobleaching system, 2409 Black smoker plume waters aerobic anoxygenic photosynthetic bacteria, 337 Bladder catheterization biofilms and quorum sensors, 3486 Blood clot-dissolving agents plasmin-resistant streptokinase, 824 Blue light-excited nucleic acid dyes aquatic bacteria, 1725 Borrelia afzelii Ixodes ticks do not inherit, 3089 Borrelia burgdorferi differential transmission, 1169 susceptibility of mice, 4596 Borrelia spp. China, Russia, and Japan, 2705 Bovine C. parvum RAPD-PCR analysis, 2262 Bradyrhizobium japonicum high copy numbers of RSa, 1845 lipid synthesis, 1963 NAD-malic enzyme, 4073 Bradyrhizobium spp. LPS profiles from legume nodules, 902 rDNA RFLPs and rep-PCR fingerprints, 2096 Branched-chain 2-oxo acids

fusel alcohol production, 1303

S. aureus, 763

Branched-chain-amino-acid transporter

xvi

Branta canadensis

Giardia and Cryptosporidium, 2736

Brevibacteria

methionine conversion to thiols, 3320

Brevibacterium linens

L-methionine -lyase, 3327

Brevibacterium spp.

osmotic upshock, 3641

Brine shrimp nauplii

Vibrio bioencapsulation, 2318

cloning, nucleotide sequence, 763

Broad-host-range lytic bacteriophages

prevalence, 575 Broad-host-range replicons

marine sediment bacteria, 2822

Brochocin-C

production by B. campestris, 4757

Brochothrix campestris

brochocin-C production, 4757

Brominated biphenyls

PCB dechlorination, 1786

reductive dehalogenation, 940

Brominated methanes

oxidation in natural waters, 4629

Brown rot of potatoes

R. solanacearum detection, 4546

Brush border membrane vesicles insecticidal crystal proteins, 1563

Bsn-t alleles

French A. bisporus strains, 2105

BTEX

chromosomal reporter for sensing, 2730

high-affinity Cry1A receptor in M. sexta, 2158

BTX

metabolism in soil, 4924

Buffering capacity

neutrophiles and alkalophiles, 1344

Building materials

microbes and VOCs, 2914

Burkholderia cepacia

biocontrol of R. solani, 3939

phosphonoalanine mineralization, 2287

2,4,5-T metabolism, 2086

Burkholderia spp.

individual species detection, 4994

Bush bean phylloplane

bacterial gene transfer, 1902

Button mushroom

metabolite effects, 5053

NADP-mannitol dehydrogenase, 4689

Butyrolactone I

effect on A. terreus, 3707

c2-like bacteriophages

lactococci, 4255 C₁₈-carboxypropylbetaine

M. bovis detection in milk, 3099

PAH biodegradation, 4610

uptake by E. coli, 4068

Cakes

mold growth, 192

Calves

E. coli O157:H7 shedding, 1975

Camembert cheese RDO area lactococci, 4729

Campylobacter coli

low temperature effects, 581

Campylobacter jejuni

activity at low temperatures, 3917

genomic instability, 1816

Campylobacter spp.

differentiation of isolates, 363

epidemiological typing, 2346 low-osmolality medium effect, 4643

survival in water, 733

Canavanine

effect on B. cereus, 4683

Candida milleri

growth modeling, 2616

Candida utilis

carotenoid production, 1226, 2676

Canine gastric mucosa

Helicobacter spp., 3998

Capillary electrophoresis measurements electrophoretic mobility, 2572

Capsular polysaccharides

role in cheese moisture retention, 2147

Sinorhizobium spp., 4930 Capsule synthesis

Hyphomonas biofilms, 2906

Carbohydrate fermentation

Hexamita sp., 203

Carbohydrate metabolism

citrate transporters, 1594

Carbon content

bacteria in marine environments, 3352

Carbon isotope ratios

substrate usage marker, 4202

Carbon limitation

NADP-isocitrate dehydrogenase kinetics, 4958

Carbon monoxide oxidation

root-associated bacteria, 4939

Carbon source

K. oxytoca nitrate removal, 2970

Carbon tetrachloride

degradation, fate in sludge, 2350

Carbon utilization

microbial community succession in com-

post, 4062

S. lividans, 4217

4-Carboxy-4'-sulfoazobenzene

bacterial utilization, 2315 Carboxydichlorofluorescein

S. cerevisiae detection, 1139

Carboxyfluorescein

S. cerevisiae detection, 1139

Carotenoids

E. coli protection from UV-B, 1972

improved production, 2676

production by C. utilis, 1226 Casein

L. lactis amino acid supply, 1991

Catabolism

glucose, 4830 methionine, by lactococci, 4670

Catalase gene

regulation of expression in L. sake, 1359

cbaABC gene-carrying transposons

structure and distribution, 1940

cel gene mutants

A. tumefaciens root colonization, 2341

Cell dry mass determination, 688

Cell envelope proteinase

L. lactis amino acid requirements, 1991 Cell lysis

P. putida, 4904

Cell size

flagellate grazing effect, 1910

Cell surface epitopes

L. monocytogenes probes, 3070

Cell surface proteins

functional display in L. lactis, 342

Cell surface-engineered yeast

cellooligosaccharide assimilation, 4857

Cell wall

fluorescent in situ hybridization, 3052

Cell wall proteins

nisin-resistant yeast cells, 4047 Cell wall-associated protease

B. subtilis α-amylase production, 2875

Cellobiohydrolase transcripts P. chrysosporium, 1924

Cellobiose dehydrogenase transcripts

P. chrysosporium, 1924

Cellobiose-colistin agar

V. vulnificus isolation, 1721 Cellooligosaccharides

assimilation by yeast, 4857

Cellulases

T. neapolitana, 4774

Cellulomonas fimi

cellulose hydrolysis, 2374

Cellulose

hydrolysis by C. fimi, 2374

Cellulose binding domain

C. cellulovorans, 1086

Cellulose molecules molecular size distributions, 2374

Cellulose-binding β-glucosidase

P. chrysosporium, 2748

Centrifugation N. fowleri recovery from water, 955

Cerebrosides antifungal metabolites, 4482

Ceriporiopsis subvermispora

MnP-dependent H2O2 production, 68 Chaetomium thermophilum

laccase, 3175

Chaperone coexpression plasmids

effects on protein production, 1694

Charophycean green algae

epiphytic bacteria, 4384 Chattonella spp.

algicidal bacteria, 2806

Cheddar cheese

flavor development, 3327, 3411 L. monocytogenes control, 4842

probiotic L. paracasei strains, 2192

production, 588

Cheesemaking endopeptidase O, 3411

flavor development, 1950

L. lactis subsp. cremoris, 4142

L. lactis subsp. lactis, 1673 L. monocytogenes control, 4842

lactococcal bacteriophages, 4255

lactococci, 4729 moisture retention, 2147

P. roquefortii, 5012 PR oxidase, 5012

Chemoreceptor gene

L. ferrooxidans, 2380 Chemostat cocultures flagellate grazing and bacterial cell sizes,

1910 Chemostat culture

K. oxytoca nitrate removal, 2970

plantaricin C production, 3512

Chemotaxis

R. meliloti and starvation, 1708 Vibrio strains and fish mucus, 1573

Chesapeake Bay

C. parvum oocysts, 1070 mercury-resistant Streptomyces strains, 3383

Chestnut blight fungus

vegetative incompatibility, 2988

Chickens

GI tract bacterial community, 4084

Chimeric protein mutants pediocin AcH, 1997

China

Lyme borreliosis, 2705

Chitinases

Alteromonas sp., 472

Chitin-containing compost Bacillus endochitinases, 3397

Chitosanases

exo-β-D-glucosaminidase, 890

Chlorhexidine

oral bacterium susceptibility, 3515

Chloride dependence H. halophilus, 3813

Chlorinated-solvent-contaminated aquifers microbial diversity, 3869

Chlorine disinfection

E. coli O157:H7 resistance, 4658

2-Chloro-1,4-dimethoxybenzene novel cofactor for LiP catalysis, 830

Chlorobenzene

degradation in groundwater, 4185 3-Chlorobenzoate-degrading bacteria

endemicity in soil, 1620

Chlorocatechol degradation genes horizontal transfer, 2126

Chloroform

oxidation by P. stutzeri, 3023

Chloromethane emission wood-rotting fungi, 2831

Chloromethane metabolism Methylobacterium strain CM4, 1933

Chlorophenol utilization

D. dehalogenans growth yields, 352 Chloro-substituted aromatic compounds

biodegradation, 3290

Cholera toxin

signal induced in Saccharomyces, 564

Cholesterol oxidase

Pseudomonas strain, 1929

Choline

degradation in estuaries, 1045 glycine betaine synthesis, 4095

Choline derivatives

P. fellutanum osmotolerance, 273

Chromate sensors A. eutrophus, 453

Chromosomal tod-luxCDABE reporter BTEX sensing, 2730

Chroococcidiopsis

DNA extraction method, 4053 Chrysanthemums

rhizosphere bacteria, 4950

Chrysomela scripta

toxic Cyt1Aa protein, 4368

yeast sensu stricto hybrids, 3887

Citrate transport system induction by acid stress, 850 lactic acid bacteria, 1594

C. parvum oocysts, 427

Clay

phenanthrene degradation effect, 3123

clc genes

horizontal transfer in sludge, 2126 Cleaning agents

lipase production, 2644

Clinical specimens C. burnetii, 4234

Cloning

A. bisporus NADP-mannitol dehydrogenase cDNA, 4689

A. latus PHA synthesis gene, 4897

A. nidulans xlnD gene, 1412

A. trota aerolysin gene, 2473

B. subtilis phytase gene, 2079

bacterial globin gene, 2220

cold-adapted lipase gene, 486 inositol monophosphatase gene, 2609

L. brevis xylT gene, 4720

L. ferrooxidans chemoreceptor gene, 2380

L. lactis purDEK genes, 4321

L. rhamnosus pepR gene, 1831 lactococcal R/M system, 2424

levansucrase genes, 3180

β-mannanase gene, 4428

MLG1 from C. carbonum, 385

β-N-acetylglucosaminidase gene, 2920

P. chrysosporium β-glucosidase gene, 2748 P. chrysosporium leu2, 2624

P. purpurogenum α-galactosidase cDNA,

4489 P. rhodozyma rpL41, 1947

P. shermanii pip gene, 4736

phenolic acid decarboxylase gene, 1466 ptsH and ptsI from L. monocytogenes,

3147

pyruvate decarboxylase genes, 94

S. aureus brnQ, 763

S. paucimobilis oxygenase gene, 2520

L-threonine aldolase gene, 549

V. parahaemolyticus gyrB, 681

vanillate, syringate O demethylation gene, 836

xynB from D. thermophilum, 1759

Clostridium acetobutylicum E. coli acetone production, 1079

Clostridium beijerinckii glucitol genes, 1612

peptide deformylase, 1780

Clostridium botulinum Finnish trout farms, 4161

time-to-toxicity analysis, 4416

Clostridium botulinum group II

genomic analysis, 703

Clostridium cellulovorans cellulose binding domain, 1086 EngF, 1086

Clostridium parvum

oocyte surface properties, 4439

Clostridium perfringens coastal marine distribution, 2596

Clostridium proteoclasticum

detection by competitive PCR, 907

Clostridium sporogenes nitroprusside effects, 3195

Coal tar-contaminated sites naphthalene catabolism, 3633 Coastal marine environment

C. perfringens distribution, 2596

Coastal picoplankton community estimation of diversity, 4522

Cochliobolus carbonum

MLG1 cloning, disruption, 385

polygalacturonase mutants, 1497 Cocoa fermentation

defined microbial inoculum, 1477

Coculture

A. polyphaga-M. avium, 2256

Cold stress

VTEC detection in ground beef, 1640

Cold-adapted lipase

Pseudomonas sp., 486 Cold-adapted protease

engineering, 492

Coliform bacteria

detection, 1018

indicators of water purity, 3079

Colilert method

water quality monitoring, 3079

Collembolans

bacterium plasmid transfer, 2652 gut microbiology, 2660

Colletotrichum gloeosporioides f. sp. ae-

schynomene IAA biosynthesis, 5030

Colloidal particles

electrophoretic mobility, 2572

Colony morphology V. cholerae O1, 3648

Colony variants

P. luminescens, 3214 Comamonas acidovorans

grazing pressure, 1910

PHA synthase gene analysis, 3437

polyester polyurethane degradation, 62 Community composition

chicken GI tract, 4084

Community structure

ammonia biofilter, 4877 chicken GI tract bacteria, 4084

coastal picoplankton, 4522

nitrifiers from wastewater, 3584

rhizosphere bacteria, 4950

Wadden Sea sediments, 2691

Community-level control three-compartment activated sludge sys-

tem, 2528 Compatible solute accumulation

Thermococcus spp., 3591

Competition L. monocytogenes and L. lactis growth,

3159 methylotrophs that degrade DCM, 1194

R. etli in the field, 2630

TCE and toluene degraders, 208

Competitive microflora

S. typhimurium suicide response, 1323 Competitive PCR

C. proteoclasticum, 907 toxic cyanobacteria, 2639

Complement-mediated killing

determination, 515 Complex bacterial communities

16S rRNA quantification, 4581

Bacillus endochitinases, 3397

C. thermophilum laccase, 3175 copolyester degradation, 1731 disease suppression, 4015 microbial community succession, 4062

Confluent and various sizes image analysis method automated colony counting, 1400

Confocal laser scanning microscopy biofilms, 4115

Consensus sequences synthetic promoter strength, 82 Consortia

atrazine catabolism, 178 PCB dechlorination, 3359 trichlorobenzene dechlorination, 496

Contaminant rDNA sequences environmental studies, 3110

Copper biochelates isolation from M. trichosporium, 1115

Copper(II) adsorption by *Bacillus* spores, 1123 Coral bleaching

temperature and Vibrio adhesion, 1379 Corbicula fluminea

C. parvum oocysts, 427 Cosubstrate oxidation N. europaea, 1372 Cottonwood leaf beetle

toxic Cyt1Aa protein, 4368 COVASIAM

automated colony counting, 1400 Coxiella burnetii PCR detection, 4234

Crassostrea virginica C. parvum oocysts, 1070 V. vulnificus, 1459

V. vulnificus, 1459 V. vulnificus phages, 346

Crenarchaeota dibiphytanyl ether lipids, 1133 diversity in soils, 4333 phylogenetic analysis, 4333

fossil fuel degradation, 1447 Cricket hindgut microbiota

characterization, 752
Crown gall
A. tumefaciens mutants, 2341

biocontrol, 3977 Cry1A receptors in insects BT-R₁, 2158

Cry3A yield optimization, 3932

suppression of resistance, 4368 cry genes

Mexican B. thuringiensis collection, 4965 Cryphonectria parasitica vegetative incompatibility, 2988

Cryptic gene-mobilizing plasmids rhizosphere of wheat, 880

Cryptosporidium parvum
β-tubulin gene polymorphism, 4477
DNA fingerprinting, 1584
immunomagnetic separation, 4495
oocyst detection, 1743
oocyst inactivation, 784
oocyst survival, 1070
oocysts in freshwater clams, 427
PCR identification, 1454
PCR, IFA detection limits, 2281
RAPD analysis, 1954

viability assessment (Letter), 3544

RAPD-PCR analysis, 2262

Cryptosporidium spp.
differentiation by PCR, 1454
migratory Canada geese, 2736
oocyst sedimentation, 4460
c-type cytochromes

P. putida Mn oxidation, 3549, 3556 Culex quinquefasciatus Cry11B cross-resistance, 4174

Culturability Campylobacter spp., 4643 starved E. coli O157:H7, 4658

Culture conditions aflatoxin gene expression, 2275 porin protein expression, 138

Cultured marine fish
S. iniae transmission, 4065
Cuticle-degrading enzymes

M. anisopliae and pH, 709 Cutinase

production by *S. cerevisiae*, 316 secretion by *A. awamori*, 2794 Cyanide assimilation

P. fluorescens, 4452 Cyanobacteria

detection, 34
DNA extraction from *Chroococcidiopsis*,
4053

4053
EPS production, 1130
fingerprinting and diversity, 265
growth rate and rRNA content, 3346
lichen symbiont diversity, 310
metal sorption, 1545
nitrogenase localization, 3052
photosynthesis and stress, 3893
Synechococcus growth on urea, 2361
UV-A and nanoflagellate grazing, 287

Cyanobacterial mats sulfate-reducing bacteria, 2943 Cyanophages

PCR detection, quantification, 2051 Cyclic AMP

S. sclerotiorum inhibition, 2539 Cyclic glucan synthesis

R. meliloti, 1290 Cyclic lipodepsinonapeptides P. syringae pv. syringae, 226

P. syringae pv. syringae, 226 Cycloclasticus spp. PAH degradation, 4703

Cyclospora cayetanensis detection in wastewater, 2284

Cylindrocarpon didymum morphine oxidation, 4106 L-Cysteine production

E. coli, 1607 L-Cystine production E. coli, 1607

Cysts sensitive and rapid detection, 1743

CytlAa activity against sheep blowfly larvae, 4060 toxicity to leaf beetle, 4368 cvtIAbI

expression in *B. sphaericus*, 3910 Cyt2Aa

activity against sheep blowfly larvae, 4060 Cytochrome c₇ D. acetoxidans, 1308 D. desulfuricans, 1308

Cytochrome c maturation P. putida Mn oxidation, 3556 Cytochrome P-450 morpholine degradation, 159 Cytochrome P-450 monooxygenase

aflatoxin biosynthesis, 4834
F. sporotrichioides TRIII gene, 221

Cytochrome P-450_{BM-3} monooxygenase in vivo application, 3784 Cytophaga xylanolytica

α-t-arabinofuranosidase, 43, 1919 Cytoplasmic membrane lipoprotein LppC S. equisimilis acid phosphatase, 2439

Dairy farms E. coli O157:H7 dissemination, 1390

Dairy products

L. lactis and citrate, 850

L. lactis subsp. lactis, 1673
lactococcal bacteriophages, 4618

Damping-off biological control, 3939 Date palm pathogens

PCR detection, 633 DDT residues

metabolism by *P. acidovorans*, 2141

Dechlorination
Aroclor 1260, 1052, 1786
2,3,5,6-tetrachlorobiphenyl, 2966, 3359
tetrachloroethene, 1270
trichlorobenzenes, 496
UASB reactors, 1860
Decolorized olive oil mill wastewaters

P. flavido-alba, 2726 Dehalobacterium formicoaceticum dichloromethane metabolism, 646

Dehalogenation Aroclor 1260, 1786 brominated biphenyls, 940 fluorophenols, 1256 Dehalospirillum multivorans

improved dechlorination of reactors, 1860

Deletion mutagenesis rbo from D. vulgaris, 2882 Delignification

kraft pulp, 2117 Demethylation inhibitors

P. digitatum drug resistance, 3983 Demethylsterigmatocystin

conversion to sterigmatocystin, 166 Denaturants and organic solvents effects on thermostable enzyme, 2152

Denaturing gradient gel electrophoresis ammonia oxidizer analysis, 2958 bacterial species composition, 5046 biofilm genetic diversity, 3464 nifH genetic diversity, 2770 rhizosphere bacteria, 4950

Denitrification diatom-inhabited sediment, 3264 monoterpene effect, 520 P. stutzeri and RpoN, 3092 Pseudomonas sp. strain JR12, 81

Pseudomonas sp. strain JR12, 813 rivers, 2533 Denitrifying bacteria identification, 3769

phenol degradation, 2424 Depsipeptide ionophores B. cereus emetic toxin, 1338 Desmids

epiphytic bacteria, 4384

Desulfitobacterium dehalogenans
growth yields, 352

Differential display

prokarvotic mRNA, 3698

Desulfitobacterium frappieri reductive dehalogenation, 4603 Desulfocapsa sulfoexigens sp. nov. sulfur disproportionation, 119 Desulfovibrio desulfuricans cytochrome c_7 production, 1308 Desulfovibrio spp. oxygen consumption, 1034 Desulfovibrio vulgaris insertion element ISD1, 53 rbo deletion mutagenesis, 2882 Desulfurization dibenzothiophene, 2327 diesel oils, 2327 Rhodococcus strain X309, 4363 Desulfuromonas acetoxidans cytochrome c_7 production, 1308 Detection B. cereus emetic toxin, 1338 B. distasonis in river water, 4103 bacteria in food, 1157 bacteriophages in wastewater, 4307 C. burnetii, 4234 C. cayetanensis in wastewater, 2284 C. parvum oocysts, 1743 C. proteoclasticum, 907 Campylobacter spp. in water, 733 cells and spores in soil, 2463 coliphages in wastewater, 4307 confluent microbial colonies, 1400 date palm pathogen, 633 denitrifying bacteria, 3769 E. coli, 1018 E. coli O157:H7, 1640, 3389 E. coli O157:H7 in beef, 1153, 4390 E. risticii, in snails, 2888 enterotoxin production, 1634 enteroviruses in wastewater, 4307 Giardia cysts, 1743 hepatitis A virus, 504 indicators of water purity, 3079 individual species in mixed culture, 4994 infectious rotaviruses, 2392 infectious tobamoviruses, 1430 iron-oxidizing bacteria, 4846 L. pneumophila, 2686 M. bovis in milk, 3099 M. hyopneumoniae, 543 M. pluton in honeybees, 1983 marine cyanophages, 2051 mesophilic B. cereus, 3525 microsporidia, 333 molds in food, 1157 nitrate-reducing bacteria, 4846 nitrification inhibitors, 3656 P. infestans mtDNA polymorphisms, 4007 P. ostreatus fruit-body-specific hydrophobin, 4028 P. salmonis, 3066 PCBs, 5023 PCR for in situ detection, 1536 phenol degraders in sludge, 4396 plasmid transfer in marine bacteria, 2670 Pseudomonas 16S rRNA genes, by PCR, psychrotrophic B. cereus, 3525 R. solanacearum, 4546 rhizopine-catabolizing bacteria, 4944

S. cerevisiae, 1139

shiga toxin-producing E. coli, 2449, 4210

Shigella spp. in mayonnaise, 1242

sulfate-reducing bacteria, 1700 T. gondii in water, 2278 toxin-producing cyanobacteria, 34 uncultivated bacillus in soil, 4588 V. parahaemolyticus in shrimp, 681 verotoxigenic E. coli, 147 viruses in mussels, 3118 viruses in shellfish, 858 waterborne coliforms, 1018 watermark disease of willows, 3966 yeasts in food, 1157 Detection limits C. parvum in soil, 2281 Dextran-producing bacteria L. mesenteroides, 1644 Leuconostoc strains, 3096 Dextransucrase L. mesenteroides, 1298 Dextransucrase C-terminal deletions L. mesenteroides, 1644 Diamondback moths B. thuringiensis toxins, 1385 Diatom-inhabited freshwater sediment nitrate microprofiles, 3264 Diatrizoate fungal transformation, 3114 Diazotrophs diversity in salt marsh grass, 4276 Dibenzofuran degradation oxidation and ring cleavage products, 2215 yeast, 2215 Dibenzothiophene desulfurization, 2327 Dibiphytanyl ether lipids nonthermophilic crenarchaeotes, 1133 Dibromomethane oxidation in natural waters, 4629 1,1-Dichloro-2,2-bis(4-chlorophenyl)ethylene metabolism by P. acidovorans, 2141 α,ω-Dichloroalkane degradation Pseudomomas spp., 3507 3,4-Dichloroaniline mineralization, 3305 cis-1,2-Dichloroepoxyethane isoprene utilization, 2800 Dichloroethene humic acids and oxidation, 3102 [1,2-14C]Dichloroethene anaerobic oxidation, 1560 1,1-Dichloroethylene oxidation by P. stutzeri, 3023 Dichloromethane dehalogenase methylotroph competitiveness, 1194 Dichloromethane metabolism D. formicoaceticum, 646 methylotrophs, 1194 3,5-Dichloro-p-anisyl alcohol biotransformation, 3225 2,6-Dichlorophenol mineralization by a Ralstonia sp., 2566 2,4-Dichlorophenoxyacetic acid degraders interspecies gene transfer, 4089 1,3-Dichloropropene degradation by P. cichorii, 2931 Dictyoglomus thermophilum xynB cloning, 1759 Diesel oils desulfurization, 2327 Dietary stress

E. coli O157:H7 in calves, 1975

Difluoromethane methanotrophy inhibitor, 4357 Digestive tract bacteria luciferase genes as biosensors, 2721 Dihydrodemethylsterigmatocystin conversion to dihydrosterigmatocystin, 166 Dimethylsulfide fungal DMSP lyase activity, 1484 Dimethylsulfonioacetate S. meliloti osmoprotection, 1420 Dimethylsulfoniopropionate DMS release by salt marsh fungi, 1484 S. meliloti osmoprotection, 1420 Dimethylsulfoniopropionate lyase F. lateritium, 106 salt marsh fungi, 1484 Di-(2-ethylhexyl)phthalate biodegradation, 4711 Disease-suppressive compost use of grass clippings, 4015 Dissimilatory iron reduction G. sulfurreducens, 3188 Distribution bacteria in Ross Sea sediment, 3838 bacterial populations in lakes, 3776 marine C. perfringens, 2596 R. leguminosarum in soil, 970 Thiomicrospira spp. in sediment, 4650 Xenorhabdus, Photorhabdus nematode hosts, 4246 Diversity bacterial antibiotic effects, 5020 coastal picoplankton, 4522 contaminant rDNA sequences, 3110 contaminated aquifer microbes, 3869 crenarchaeotes in soils, 4333 cyanobacteria, 265 Frankia of actinorhizal plants, 3539 human GI tract bacteria, 3854 Lyme disease spirochetes, 1980 methanogens in rice paddy, 960 nitrifying bacteria, 3042 North Sea bacteriophages, 4128 Oregon coastal bacterioplankton, 294 P. azotofixans from maize, 3860 phenanthrene degraders, 2560 plastid SSU rRNA genes, 294 rhizobia in Australia, 3989 rhizobia from Acacia spp., 4912 salt marsh diazotrophs, 4276 symbiotic cyanobacteria in lichens, 310 DNA chicken GI tract bacteria, 4084 extraction from Chroococcidiopsis, 4053 DNA extraction and purification method detection of cells and spores, 2463 DNA fingerprinting California C. parvum isolates, 1584 DNA modification systems X. oryzae pv. oryzae, 1663 DNA polymerases DNA amplification mediation, 3748 DNA sequence similarity California C. parvum isolates, 1584 DNA-DNA reassociation X. fragariae strain relatedness, 3961 dppIV prolyl dipeptidyl peptidase, 4809

Drinking water biological filter microbes, 2755 E. coli survival, 197 monitoring, 3079

T. gondii oocyst detection, 2278

Drug resistance
E. coli in pig feces, 366
induction by vanadium, 4317
P. digitatum, 3983

Drug resistance markers
P. rhodozyma rpL41, 1947
Dutch grassland soils
uncultivated bacillus detection, 4588

Dye permeability assay
C. parvum oocysts (Letter), 3544

Echinoderms

symbiotic Thiothrix spp., 3491

V. vulnificus heterogeneity, 4676

ggs

S. enterica serovar Enteritidis, 2166

Ehrlichia risticii detection in snails, 2888

ehxA

E. coli pathogenicity indicator, 4134 Elaeagnaceae

diversity of *Frankia* strains, 3539 Electrical double layer properties

semipermeable membranes, 2295 Electron acceptors dichloroethene oxidation, 3102

vinyl chloride oxidation, 3102 Electrophoretic mobility C. parvum oocytes, 4439

C. parvum oocytes, 4439
CE meaurements, 2572
Electroporation

S. erythraea, 1580 Elemental palladium enzymatic recovery, 4607

Ellipsometric measurement bacterial films, 3690

Emergent macrophytes decomposition by fungi, 607

Emetic toxin

B. cereus, 1338

Encephalitozoon intestinalis confirmation in water, 3332

Endemicity pristine soil 3CBA degraders, 1620

Endochitinases

Bacillus strain, 3397

Endoglucanase

A. niger gene expression, 3615

S. rolfsii, 594 T. reesei, 555 Endoglycanases

S. rolfsii, 594 Endopeptidase O L. helveticus, 3411

Endophytic fungi toxicity to livestock, 601

Endopolygalacturonase PG1 F. oxysporum, 1967

Endoproteolytic dibasic proprotein processing secretory protein maturation, 3202

Energy spilling S. bovis, 976

EngF

C. cellulovorans, 1086

Enrichment cultures

bacterial species composition, 5046 brominated methane oxidation, 4629 hexadecan-2-one degradation, 1576

Enteric bacteria death in water, 1736

Enteric pathogens

Campylobacter spp., 4643
low-osmolality medium effect, 4643

survival on food, 3883 Enterically transmitted viruses hepatitis E virus, 4485

Enteritis

low temperature and C. coli, 581

Enterobacter cloacae TNT degradation, 2864

V-induced drug resistance, 4317

Enterocin I

E. faecium, 4883
Enterococci

antibiotic resistance, 1825 enumeration in water, 678 indicator of water purity, 3079

Enterococcus faecalis in vivo gene transfer, 626 survival in an oligotrophic microcosm, 4238

Enterococcus faecium enterocin I, 4883 Enterocytozoon bieneusi

confirmation in water, 3332 Enterohemorrhagic E. coli

detection in ground beef, 1640 radish sprouts, 1532 Shiga-like-toxin-producing *E. coli*, 4134

Enterolert method water quality monitoring, 3079

Enterotoxic B. cereus rapid DNA test, 1634

Enterotoxigenic Staphylococcus aureus cell viability indicator, 4264

Enteroviruses

treated wastewater, 4307

Entomopathogenic bacteria insecticidal toxins, 3029, 3036

Entomopathogenic fungi aphid biocontrol, 4260 E. neoaphidis, 4260 somatic hybrids, 88

Entomopathogenic nematodes bacterial symbionts, 4246 X. nematophilus lecithinase, 2367

Entomopathogenic potential *B. thuringiensis*, 4782

Enumeration

aquatic bacteria, 1725
enterococci in water, 678
individual species in mixed culture, 4994
iron-oxidizing bacteria, 4846
nitrate-reducing bacteria, 4846
soil and sediment bacteria, 5000
toxic cyanobacteria, 2639
Enzymatic combustion

aromatic, aliphatic compounds, 399
Enzyme I

L. monocytogenes PTS, 3147 Enzyme-linked immunofiltration assay thiobacillus attachment to pyrite, 2937 Enzyme-linked immunosorbent assay

L. monocytogenes probes, 3070

Enzymes

cellulose hydrolysis, 4857 PCB metabolite degradation, 4637 Ross Sea organic matter, 3838

Epicidin 280

heterologous expression, 3140 Epidemiological typing Campylobacter isolates, 2346 Epifluorescence enumeration

soil and sediment bacteria, 5000

Epifluorescence microscopy fluorescent gram stain, 2681

Epiphytic bacteria charophycean green algae, 4384 E. herbicola, 3256

plant surface biofilms, 4789

Erwinia amylovora inhibition by E. h

inhibition by E. herbicola, 1837 Erwinia herbicola

antibiotic production, 1837 epiphytic fitness, 3256

Erynia neoaphidis aphid biocontrol, 4260

Erythromycin-producing bacteria sonication-dependent electroporation, 1580

Escherichia coli

acetone production, 1079

active human tissue plasminogen activator expression, 4891

aerolysin gene expression, 2473 arginine production, 1805 bacteriocin release protein, 392 cysteine, cystine production, 1607

detection, 1018 engineered FimH heterobinary adhesins,

enhanced sFV/TNF-α secretion, 2869 glucose oxidase expression, 1405 growth/no growth modeling, 1773 heavy metal removal, 4068 hemolysin variants, 2449

4-hydroxy-2-keto-pentanoic acid aldolase, 4093

indicator of water purity, 3079 levansucrase gene expression, 3180 lux and toxic chemical detection, 4346 lytic bacteriophages, 575 mRNA detection as indicator, 1313

pediocin AcH chimera secretion, 14 PHB synthesis, 4897

phytoplasma antibody production, 4566 plasmid transfer, 2652

pressure-resistant mutants, 1566 recombinant human hemoglobin, 1589

recombinant protein folding, 1694 resistance to silver, 5042 16S rRNA accessibility to probes, 4973

16S rRNA accessibility to probes, 497 scFv antibody expression, 4862 survival in drinking water, 197

survival in Grinking water, 197 survival in fruit juice, 1566 Thermotoga enzyme expression, 2357

UV-B and carotenoids, 1972 Escherichia coli K-12

organophosphate utilization, 2601 Escherichia coli O157 strains

improved immunomagnetic separation method, 376

Escherichia coli O157:H7 apple juice, 4533 beef in Malaysia, 1153 calf fecal shedding, 1975
cell viability indicator, 4264
detection in ground beef, 1640, 4390
dissemination on farms, 1390
fluorogenic 5' nuclease assay, 3389
inactivation by irradiation, 4533
phages in sewage, 2443
radish sprouts, 1532
starvation and chlorine resistance, 4658
survival in manure, 3166
Escherichia hermannii
V-induced drug resistance, 4317
Estuarine sediments

Estuarine sediments Aroclor 1260 dechlorination, 1052 Estuarine waters

choline uptake, degradation, 1045 Ethanol production acetic acid transport in *S. cerevisiae*, 665 α-L-arabinofuranosidase, 216

α-t-arabinofuranosidase, 216 recombinant Saccharomyces yeast, 1852 Ethene TCE dechlorination, 1270

Ethylene removal from a biofilter, 4168 Eukaryotic proteins

expression in E. coli, 4891 Euprymna scolopes

symbiotic luminous bacteria, 805 European foulbrood

M. pluton detection by PCR, 1983 European lyme disease spirochetes diversity, 1980

Euryarchaeotal lineages root-associated archaea, 4983

Eutrophic lakes ammonia oxidation, 3674 bacterial life strategies, 3776 bacterial population distribution, 3776 bacterioplankton production, 431

Exhaust gas purification
bacterial community dynamics, 930
Exo-β-D-glucosaminidase

T. reesei, 890 Exopeptidases inhibition by myoglobin, 2313

Exopolysaccharide II regulation in *R. meliloti*, 1024 Exopolysaccharides

L. delbrueckii, 659 L. delbrueckii subsp. bulgaricus, 1333 P. agglomerans on wheat roots, 3740 screening for deficient mutants, 4600 unicellular cyanobacteria, 1130 V. cholerae O1, 3648

Extracellular glucan wheat straw degradation, 325 Extracellular mixed-linked glucanases C. carbonum, 385

Extracellular polymeric substances T. ferrooxidans bioleaching, 2743 Extracellular polysaccharide capsule Hyphomonas strain, 1246

Extracellular proteases
P. fluorescens, 914

Farming operations
E. coli O157:H7 in manure, 3166
Fatty acid profile typing
Campylobacter isolates, 2346
Fatty acids
bioconversion, 3784

stable-carbon-isotope compositions, 370 substrate usage marker, 4202 X. fragariae strain relatedness, 3961 Fecal flora analysis by TGGE, 3854 B. distasonis in river water, 4103 variations measured by FISH, 3336

Fecal shedding
E. coli O157:H7 in calves, 1975
Fecal sterols

coastal marine distribution, 2596 Feces

human fecal flora variation, 3336 microsporidian parasite detection, 333 Feline gastric mucosa

Helicobacter spp., 3998 Female fertility

F. subglutinans f. sp. pini, 2094 Fenton reaction

toxicity to *X. flavus*, 3759 Fermentation

Fermentative capacity
S. cerevisiae, 4226
Fermentative metabolism

cocoa, 1477

primitive protozoon Hexamita, 203

Fermenting bacteria humic acid reduction, 4507 Fermentors

S. cerevisiae culture, 1040 Ferric iron-containing minerals reductive dissolution by thermophiles,

2181 Ferrous iron

oxidation by pyoverdines, 1472 Fibrobacter spp.

glycogen futile cycling, 74 Field release assays

genetically engineered microorganisms, 2072

Filamentous fungi secretory protein maturation, 3202 Filters

drinking water treatment, 2755

N. fowleri recovery from water, 955 Fimbriae

Hyphomonas strain, 1246 FimH heterobinary adhesins E. coli, 1628 Fingerprinting

Canary Island *Bradyrhizobium* strains, 2096

cyanobacteria, 265 pesticide treatments, 2814 Finnish trout farms

C. botulinum, 4161

archaea in digestive tract, 2894 Vibrio chemotaxis, 1573

Fish pathogens detection by PCR, 3066 S. iniae, 4065 V. alginolyticus, 4269 V. vulnificus, 4676

Fitness genetically modified pseudomonad, 2634 Flagellar antigens S. typhimurium, 5033

Flagellate grazing bacterial abundance effect, 1910 bacterioplankton production, 431 Flagellation R. meliloti and starvation, 1708

Flavone glycoside antibiotic from sea grass, 1490

Flavor development sake, 4076 wine and fruit juice, 3607

Flow cytometry aquatic bacteria, 1725 biomass of small bacteria, 3900 blue nucleic acid dyes, 1725 E. coli 16S rRNA accessibility to probes, 4973

fluorescent gram stain, 2681 industrial yeast selection, 1669 infectious rotaviruses, 2392 S. cerevisiae detection, 1139

Fluorescence microscopy S. cerevisiae pH_i, 530

Fluorescence in situ hybridization microbial community composition, 2691

Fluorescent gram stain epifluorescence microscopy, 2681 flow cytometry, 2681 Fluorescent pseudomonad pyoverdines ferrous iron oxidation, 1472 Fluorescent pseudomonads

ABC systems, 4904 Fluorescent in situ hybridization bacterial cell wall, 3052 human fecal flora, 3336

R. solanaceanum detection, 4546
 Fluorescently labeled oligonucleotide probes
 E. coli 16S rRNA accessibility, 4973

Fluoroacetate poisoning in sheep ruminal bacteria to protect, 3496

Fluorogenic 5' nuclease assay E. coli O157:H7, 3389 Fluorogenic substrates

actinomycete spore analysis, 4410 fungal activity measurement, 613

Fluorophenols microbial degradation, 1256 Fly ash

metal extraction by thiobacilli, 1237 Foaming activated sludge

G. amarae quantification, 2503 Folsomia candida (Collembola) bacterium plasmid transfer, 2652 gut microbiology, 2660

Food

antibiotic-resistant enterococci, 1825 C. botulinum time-to-toxicity, 4416 C. sprogenes inhibition, 3195 detection of viable microorganisms, 1157 E. coli O157:H7 in beef, 4390 enteric pathogen survival, 3883 ham spoilage by L. carnosum, 3313 Shiga toxin-producing E. coli, 4210 sourdough microflora, 2616 yeast identification, 2207

yeast identification, 2207 Food preservation antibotulinal bacteriocin, 4757 bacteriocin AS-48, 4623 enterocin I, 4883 irradiation, 4533 pediocin PA-1, 4536 pressure treatment, 509 ultrasound, 465 Forest soils

atmospheric methane consumption, 2397 infectious tobamoviruses, 1430

Forward light scatter intensity biomass of small bacteria, 3900

Fosmids

Planctomycetales clones, 3075

Fossil fuel degradation 13C NMR study, 1447

Fot 1 insertions

PCR detection of date palm pathogen,

Fourier-transform infrared spectroscopy food-borne yeasts, 2207

Frankia spp.

diversity among actinorhizal plants, 3539

Freshwater aquaria

Nitrospira-like bacteria, 258

Freshwater clams

C. parvum oocysts, 427

Freshwater lakes

ammonia oxidation, 3674

Freshwater macrophytes

root-associated methanotrophs, 1099

Fructose medium

L. mesenteroides dextransucrase, 1298

Fruit juices

pressure-resistant E. coli, 1566

Fruit-body-specific hydrophobin P. ostreatus, 4028

ftsZ

Chroococcidiopsis, 4053

Fumigated agricultural soils methyl bromide removal, 2899

Fungal growth radii

metabolite effects, 5053 Fungal metabolites

anaerobic biotransformation, 3225

Fungal plasma membrane

patch clamping hyphal tips, 1569

Fungi

microsclerotia in soil, 3846 molecular identification methods, 133 6-nitrochrysene transformation, 3106 osmoregulatory responses, 607 presence and activity in soil, 613

screening of lignin degraders, 1548 Fusaproliferin

Fusarium-contaminated feed, 3923

Fusarium culmorum

detoxification of antifungal metabolites, 2386

Fusarium lateritium

dimethylsulfoniopropionate lyase, 106

Fusarium oxysporum

endopolygalacturonase PG1, 1967

Fusarium oxysporum f. sp. albedinis PCR detection, 633

Fusarium sporotrichioides

TRI11 gene, 221

Fusarium spp. beauvericin production, 3084

mycotoxins in animal feed, 3923

Fusarium subglutinans f. sp. pini

female fertility and mating type, 2094

Fusel alcohol production

S. cerevisiae, 1303

FV fragment-TNF-α fusion protein enhanced secretion by E. coli, 2869 Gaeumannomyces spp.

detoxification of antifungal metabolites,

gal genes

L. casei and Leloir pathway, 2013

α-Galactosidase cDNA

cloning and expression, 4489

β-Galactosidase gene

Thermus sp. strain T2, 2187

β-D-Galactosidase-positive bacteria enzyme characteristics, 1018

Gallic acid decarboxylase P. agglomerans, 4743

Game birds

B. burgdorferi transmission, 1169

Gas chromatography

lactococcal methionine catabolism, 4670 PCB congener loss, 2020

Gastric mucosa

Helicobacter spp., 3998

Gastrointestinal tract

bacterial community analysis, 4084

Giardia and Cryptosporidium, 2736

Gene expression

A. niger, 3615

A. parasiticus, 2275

A. trota aerolysin gene, 2473

aflR from Aspergillus, 3718

arsenic resistance operon, 411 bacteriophages of Lactococcus, 1147

basidiomycete I-62 laccase, 771

biofilms, 721

BTEX sensing, 2730

cytlAb1, in B. sphaericus, 3910

gram-positive bacteria, 2763

green fluorescent protein for study, 2240 inositol monophosphatase, 2609

marine bacteria, 2554

mercuric reductase gene, 695

P. chrysosporium ligninolytic enzymes, 3536

P. purpurogenum α-galactosidase cDNA, 4489

psychrophilic genes, 1163

purDEK from L. lactis, 4321

Gene regulation

Mn peroxidase gene family, 569

Gene replacement studies

S. mutans mutacin II, 2335

Gene transcription

phenolic acid decarboxylase gene, 1466 ppk from an Acetobacter strain, 896

Gene transfer

Acinetobacter strain and beets, 1550 chlorocatechol degradation, 2126

2,4-D degraders, 4089

E. faecalis, 626

phylloplane of the bush bean, 1902 rhizosphere of wheat, 880

transduction, 2780

Genetic diversity

biofilms, 3464

C. botulinum from trout farms, 4161 nifH in P. azotofixans, 2770

P. syringae pv. tomato, 1180

symbiotic cyanobacteria in lichens, 310 V. vulnificus isolates, 3403

Genetic relatedness

P. syringae pv. tomato, 1180 V. vulnificus isolates, 3403

Genetic transformation

alga-lysing bacterium, 2061

P. chrysosporium, 2624

P. rhodozyma, 1947

plant DNA to bacteria, 1550

Genetic variation

N. fowleri, 2977

Genetically engineered microorganisms

arginine synthesis, 1805 field release assays, 2072

sheep and fluoroacetate poisoning, 3496

xylose-fermenting yeasts, 1852

Genetically modified microorganisms environmental fitness, 2634

Genome analysis

C. botulinum group II, 703 gram-negative bacteria, 2710

Genomic instability

C. jejuni, 1816

Genomic plasticity P. syringae, 3948

Geobacter sulfurreducens

iron(III) reductase, 3188

syntrophic acetate oxidation, 2232

Geobacteraceae

humic substance reduction, 1504

Geotrichum candidum anti-Listeria compounds, 800

German Wadden Sea

Thiomicrospira distribution, 4650

Giardia cysts

sensitive and rapid detection, 1743

Giardia spp.

cyst sedimentation, 4460 migratory Canada geese, 2736

Gilt-head sea bream

V. alginolyticus, 4269

Vibrio chemotaxis, 1573

Glass bead DNA extraction method

M. bovis detection in milk, 3099

Gliding bacteria inhibition of other gliding bacteria, 4079

Globin gene V. stercoraria DW, 2220

organophosphate utilization, 2601

Glucanases C. carbonum, 385

B-1.4-Glucanases

C. fimi cellulose hydrolysis, 2374 Glucanolytic system

T. harzianum, 1442

Glucitol transport and metabolism

C. beijerinckii, 1612 Glucose

catabolism by Verrucomicrobiales, 4830

enzymatic activation, 3972

Glucose medium

L. mesenteroides dextransucrase, 1298

Glucose-tolerant B-glucosidase

A. oryzae, 3607

Glucosyltransferase

cyclic glucan synthesis, 1290 R. meliloti, 1290

β-D-Glucuronidase-positive bacteria

enzyme characteristics, 1018 Glutamate biosynthesis

L. lactis subsp. lactis, 2485 Glutamate dehydrogenase P. islandicum, 2152

Glutamine production bacterium-yeast system, 2952 Glutamine synthetase reaction glutamine production, 2952 Glutathione S-transferase

isoprene utilization, 2800

Glycine

enhanced sFV/TNF-α secretion, 2869 Glycine betaine

choline conversion in estuaries, 1045 synthesis from choline, 4095

Glycine free radical anaerobic toluene metabolism, 1650

Glycogen futile cycling Fibrobacter strains, 74 Glyoxal oxidase

P. chrysosporium, 3536 Glyoxylic acid oxidation

MnP-dependent H₂O₂ production, 68 Gordona amarae

rRNA hybridization probes, 2503 Gordona spp.

dibenzothiophene and diesel oil desulfurization, 2327

gpdA promoter
A. nidulans, 2229

Gram stain

aquatic bacterial population analysis, 742

Gram-negative bacteria genome analysis, 2710 Gram-positive bacteria

gene expression regulation, 2763

Granular activated sludge system bacterial community analysis, 2528

Granular sludge improved dechlorination of reactors, 1860 Grassland soils

phylogeny of bacterial 16S rRNA sequences, 871

Grazing pressure bacterial cell sizes, 1910

Green fluorescent nucleic acid dyes bacterial enumeration, 5000

Green fluorescent protein new unstable variants, 2240 plasmid transfer detection, 2670 tagging marine bacteria, 2554

Green mold disease mushrooms, 5053 *T. harzianum*, 133 Greenhouse gases

atmospheric CH₄ oxidation, 4291, 4357 rice paddy methanogens, 960

Grifola frondosa trehalose synthase, 4340 Ground beef

E. coli O157:H7, 1640

Groundwater chlorobenzene degradation, 4185

Groundwater bacteria predation by nanoflagellates, 618 Growth

B. cereus and medium architecture, 1075 Campylobacter, at low osmolality, 4643 image analysis, 3246

Growth inhibition gliding bacteria in biofilm, 4079 Growth latency

S. cerevisiae H⁺-ATPase, 779 Growth mode

arowth mode amine fluoride effect on S. sanguis, 3503

Growth modeling

E. coli, 1773 L. lactis, 3159

L. monocytogenes, 3159 sourdough microflora, 2616

Growth rate

C. beijerinckii, 1780 Synechococcus rRNA content, 3346

Growth temperature

L. monocytogenes morphology, 2065

Growth yield

D. dehalogenans, 352 Growth/no growth interface E. coli, 1773

Gut bacteria restriction enzyme profiling, 3683 Gymnodinium spp. algicidal bacteria, 2806

gyrB

V. parahaemolyticus detection, 681 gyrB-targeted quantitative PCR phenol degraders in sludge, 1203

H+-ATPase

S. cerevisiae, 779

Iabitat-based oligonucleotide

Habitat-based oligonucleotide probes subtractive hybridization, 185

Haemophilus influenzae transposon mutagenesis, 4697

E. coli silver resistance, 5042 Halobacillus halophilus

chloride dependence, 3813 Halomonas elongata

glycine betaine synthesis, 4095 Halotolerance

R. meliloti, 1024 Ham spoilage

L. carnosum, 3313
Hartmannella vermiformis
invasion by L. micdadei, 3134

Hawaiian soil bacterial community rRNA characterization, 1283

Heat shock response
A. telluris, 3063

thermophilic enteric yeast, 3063 Heat-treated food

detection of viable microorganisms, 1157
Heavy metals

accumulation by bacteria, 4317 bacterial chromate sensors, 453 bacterial oxidation, 1328 binding by *Bacillus* spores, 1123 bioremediation, 1319 effect on soil microbial community, 238 removal enhanced by *E. coli*, 4068

Helicobacter spp. antagonistic L. acidophilus, 4573 canine, feline gastric mucosa, 3998

Hemoglobin biosynthesis V. stercoraria DW, 2220 Hemolysin variants

shiga toxin-producing E. coli, 2449 Hemolytic toxin

gene cloning, expression, 2473 Hepatitis A virus

detection by IC PCR, 504 detection in mussels, 3118

Hepatitis E virus isolation from sewage, 4485

Heterologous protein secretion trout growth hormone, 2403

Heterologous proteins expression by *S. cerevisiae*, 793 *L. lactis* cell surface, 342 release by *E. coli*, 392

Heterosigma spp. algicidal bacteria, 2806 Hexadecan-2-one

anaerobic degradation, 1576

Hexamita spp. fermentative metabolism, 203

bacterial oxidation, 1328 Hierarchical phylogenetic probing

ammonia oxidizer analysis, 2958 High mountain lakes

microbial population dynamics, 4299 Homologous composite transposons

structures, 1940 Homotetrameric xylose isomerase *T. neapolitana*, 2357

Homothallic wine yeast strains

hybridization, 5039 Honeybee larvae

M. pluton detection by PCR, 1983

Horizontal gene transfer chlorocatechol degradation, 2126 naphthalene catabolism, 3633 Horizontal plasmid transfer

marine bacteria, 2670 Hospital water systems

Acinetobacter antibiotic resistance, 3499 amoebae, 1822

Host-derived signals individual AM fungus symbionts, 3473

Hot springs sulfur-turf microbial mats, 1680

L. monocytogenes PTS, 3147 Hsp104

yeast trehalose metabolism, 4614 Human fecal flora

analysis by TGGE, 3854 variations measured by FISH, 3336

Human gastrointestinal tract microbial diversity, 3854

Human granulocytic ehrlichiosis geographic risk in New York, 4663 Human immunodeficiency virus type 1

leptomycin B metabolites, 714 Human parathyroid hormone high-level production, 526

Human viruses detection by PCR, 3376

Human-derived bifidobacteria surface properties, 21

Humectant systems lactocepin I specificity, 588 Humic acids

bacterial reduction, 4507 dichloroethene oxidation, 3102 phenanthrene degradation effect, 3123 vinyl chloride oxidation, 3102

Humic substances reduction by bacteria, 1504

Humicola fuscoatra antifungal metabolites, 4482

Humidity microbial growth on building materials, 2914

mold growth on cakes, 192 Humification

C. thermophilum laccase, 3175

Hybridization probes G. amarae, 2503 Hydrocarbon hydroxylases

Acinetobacter sp., 1175 Hydrocarbon-contaminated aquifers microbial diversity, 3869

Hydrocarbon-degrading bacteria reverse sample genome probing, 637 Hydrogen oxidation genes

Sinorhizobium strain, 1657

Hydrogen peroxide

production by C. subvermispora, 68 Hydrogen-oxidizing bacteria

syntrophic acetate oxidation, 2232 Hydrophobic grid membrane filters

drug-resistant E. coli measurement, 366 Hydrophobicity

C. parvum oocytes, 4439 Hydrophobins

M. anisopliae and pH, 709 P. ostreatus, 4028

Hydrostatic pressure S. cerevisiae detection, 1139

Hydrothermal vent mussels stable-carbon-isotope compositions, 370

Hydrothermal vents aerobic anoxygenic photosynthetic bacteria, 337

Thiomicrospira spp., 4057 Hydroxamic acids

formation by a Rhodococcus amidase,

4-Hydroxy-2-keto-pentanoic acid aldolase substrate selectivity, 4093

Hyperosmotic shock

halotolerant Brevibacterium sp., 3641 Hypersaline habitats

cyanobacterial EPS production, 1130 Hyperthermophiles

P. aerophilum and tungsten, 3004 proline-producing mutant, 4328 T. ruber gen. nov., sp. nov., 3576

T. thermophilus, 4328 Hyphal tips

fungal plasma membrane microsurgery,

Hyphomonas spp. biofilm formation, 2906

EPS capsule and fimbriae, 1246

i and 1,2 flagellar antigens S. typhimurium, 5033

Identification

canine, feline helicobacters, 3998 Cryptosporidium spp., 1454

fluorescent in situ hybridization, 3052 food-borne yeasts, 2207

fungi, 4149

hydrocarbon degraders, 637 L. carnosum in ham, 3313

L. rhamnosus strains, 4816 M. pluton in honeybees, 1983

marine agarolytic Pseudoalteromonas isolate, 4378

N. ramosa, in situ, 1895

nitrifying bioreactor bacteria, 3480 P. infestans strains, 4007

P. ostreatus fruit-body-specific hydropho-

bin, 4028

Phytophthora species, 948 plant pathogens, 948

toxic chemicals, with lux genes, 4346

Image analysis

automated colony counting, 1400 bacterial biovolume, morphology, growth,

biofilms, 4115

cell dry mass determination, 688 direct in situ PCR method, 1536 neural network basis, 3246

MeBr removal from soils, 2899 Immobilized microorganisms aphid biocontrol, 4260 ethylene removal from biofilter, 4168 Immunofluorescence assay

C. parvum detection limits, 2281 Immunoglobulin heavy-chain binding protein

cutinase production by S. cerevisiae, 316 Immunological methods

phosphate starvation monitoring, 4990 Immunomagnetic capture PCR

hepatitis A virus detection, 504 Immunomagnetic separation C. parvum oocysts, 4495

E. coli O157 strains, 376 M. paratuberculosis in milk, 3153

In situ PCR amplification method development, 1536

Inactivation kinetics L. plantarum and pressure, 509

Indicator organisms rapid detection, 1018 Indigenous rhizobia

wild beans in Southern Andes, 3520

Indole-3-acetic acid production C. gloeosporioides, 5030 E. herbicola fitness, 3256

Industrial dyes transformation, 2788 Industrial yeast hybrids

flow cytometric selection, 1669 Indwelling urethral catheters

biofilms and quorum sensors, 3486

Infectious enteroviruses treated wastewater, 4307 Infectious rotaviruses

flow cytometry detection, 2392

Infectious tobamoviruses detection in forest soil, 1430

seasonal pattern in red spruce, 1436 Ink and vinegar staining

arbuscular-mycorrhizal fungi, 5004 Inoculation protocols

cocoa fermentation, 1477 mold growth on cakes, 192

survival of PAH degraders in soil, 359 Inositol monophosphatase

M. jannaschii, 2609

Cyt1Aa, 4368

Insect cells

temperature and baculovirus replication, 2237

Insecticidal crystal proteins activity against sheep blowfly larvae, 4060 B. laterosporus, 2723 B. thuringiensis, 1750, 2158, 4174, 4965 coleopterans, 4368

display by a phage, 2995 S. littoralis midgut effects, 1563 spore-toxin synergy against moths, 1385

yield optimization, 3932 Insecticidal toxins

P. luminescens, 3029, 3036

Insects

biocontrol, 4965

intracellular symbiotic bacteria, 3599 M. pluton in honeybees, 1983

Insertion elements D. vulgaris, 53

Insertion sequences

B. japonicum and RSα, 1845

Insertion site

fitness of modified pseudomonad, 2634 Insertion-duplication mutagenesis

S. pneumoniae, 4796 Integrated Monod equation

least-squares analysis, 2044 Interspecies gene transfer

2,4-D degraders, 4089 Interspecies hydrogen and acetate transfer mercury methylation, 1987

Intracellular pH

S. cerevisiae and acetic acid, 530 Intracellular responses to osmotic shock halotolerant *Brevibacterium* sp., 3641

Intracellular signals yeast spp. and cholera toxin, 564

Intracellular symbiotic bacteria mulberry psyllid A. mori, 3599 Iodinated X-ray contrast agents

fungal transformation, 3114

Ionic strength

R. meliloti cyclic glucan synthesis, 1290 α-Ionone

hydroxylation by Streptomyces, 3878 Ionones

hydroxylation by Streptomyces, 3878 ipb DNA module

TCE-oxidizing Pseudomonas strains, 2454 Iron(III) reductase

G. sulfurreducens, 3188 Iron-oxidizing bacteria bioleaching control system, 4555

European sediments, 4846 reduction of soluble iron, 2181

Irradiation

E. coli O157:H7 inactivation, 4533 ISD1

D. vulgaris, 53 Isoamyl alcohol

production by yeast, 4076

Isoelectric point

virus adsorption and transport, 405 Isolation procedures

canine, feline helicobacters, 3998 inoculum dilution enrichment, 5046 phenol-degrading bacteria, 4396 rhizopine-catabolizing bacteria, 4944

V. vulnificus, 1721 Isoprene utilization microbial consumption, 172 Rhodococcus strain, 2800

Isoprenoid pathway carotenoid production, 2676

Isopropylbenzene oxidization by Pseudomonas strains, 2454

Ixodes scapularis Lyme disease risk in New York, 4663 Ixodes ticks failure to inherit B. afzelii, 3089

Japan Lyme borreliosis, 2705 Juncus effusus decomposition by fungi, 607

K antigens
Sinorhizobium spp., 4930
katA
regulation of expression in L. sake, 1359

α-Keto acids

P. fluorescens KCN assimilation, 4452
Killing genes

fluorescent pseudomonads, 4904

Kinetics acetate oxidation, 2301 NADP-isocitrate dehydrogenase, 4958 novel marine bacterium, 4467 picoplankton diversity estimates, 4522 wine fermentation, 3831

KIPHO5 trout growth hormone expression, 2403

Klebsiella aerogenes phosphonate, phosphite utilization, 3754 Klebsiella oxytoca

high nitrate load removal, 5016 nitrate removal, 2970

Kluyvera ascorbata nickel toxicity reduction, 3663 Kluyveromyces lactis

trout growth hormone expression, 2403 Koji mold

prolyl dipeptidyl peptidase, 4809 *Korarchaeota* SSU rRNA gene sequences, 5064

Kraft pulp biobleaching, 2409 D. thermophilum xynB gene, 1759 delignification by T. versicolor, 2117

Laboratory-scale leaching plant metal extraction by thiobacilli, 1237

basidiomycete I-62, 771 C. thermophilum, 3175 P. cinnabarinus, 1766 wood-rotting fungi, 1601

wood-rotting fungi, 1601 Lactic acid bacteria citrate transporters, 1594 class IIa bacteriocins, 3275

growth in milk, 4321 luciferase genes as biosensors, 2721 role in cheese moisture retention, 2147 silage fermentation, 2982

Lactic acid concentration

E. coli growth modeling, 1773

Lacticin 3147

Lacticin 3147 mastitis pathogen inhibition, 2287 mode of action, 439

Lactobacilli methionine conversion to thiols, 3320 probiotic strains in cheese, 2192

Lactobacillus acidophilus anti-Helicobacter activity, 4573

Lactobacillus brevis xylT cloning, 4720 Lactobacillus casei

gal genes for Leloir pathway, 2013 Lactobacillus delbrueckii subsp. bulgaricus exopolysaccharide production, 659, 1333 Lactobacillus helveticus endopeptidase O, 3411 Lactobacillus paracasei

probiotic Cheddar cheese, 2192 Lactobacillus plantarum

actobacillus plantarum effects of pressure treatment, 509 molecular analysis of plantaricins, 1871 phenylalanine conversion, 3009 plantaricin C production, 3512 two-peptide bacteriocins, 2269 xylT expression, 4720

Lactobacillus rhamnosus prolinase gene, 1831 strain-specific identification, 4816 Lactobacillus sake

Lactobacillus sake
exopeptidase inhibition, 2313
katA expression regulation, 1359
Lactobacillus sanfranciscensis

growth modeling, 2616 Lactobacillus spp. molecular typing, 2418 silage fermentation, 2982

Lactocepin I specificity in humectant systems, 588 Lactococcal nisA promoter gene expression regulation, 2763

Lactococcal proteinase P₁ specificity in humectant systems, 588 Lactococci

Camembert cheese RDO area, 4729 ecological study, 4729 MAbs against bacteriophages, 4255 methionine catabolism, 4670 methionine conversion to thiols, 3320 type II R/M system cloning, 2424

Lactococcin A secretory apparatus

L. lactis and pediocin PA-1, 818

Lactococcus lactis

abortive infection mechanism, 4748 bacteriophage resistance, 4618 caseins and amino acid supply, 1991 competitive growth modeling, 3159 milk peptide utilization, 1230 pediocin PA-1 production, 818 pepP gene, 4591 pip gene expression, 4736 purDEK gene cloning, 4321 surface display of heterologous protein,

Lactococcus lactis subsp. cremoris bacteriolytic enzymes, 4142 flavor development in cheese, 1950 lactose metabolism, 2111

Lactococcus lactis subsp. lactis acid stress CitP induction, 850 aspartate deficiency, 1673 conjugative oriT, 1541 glutamate biosynthesis, 2485 L. monocytogenes control, 4842 slow milk coagulation, 1673

Lactococcus spp. bacteriophage gene expression, 1147 citrate transporters, 1594

metabolism by *L. lactis*, 2111
Lake Vanda, Antarctica
manganese reduction, 3791

ammonia oxidation, 3674 bacterial life strategies, 3776 bacterial population distribution, 3776 bacterioplankton production, 431 Hg methylation, demethylation, 1013 manganese reduction, 3791 microbial population dynamics, 4299 purple sulfur bacterium remains, 4513

Lantibiotics epicidin 280, 3140 mutacin II, 2335 S. aureus, 4803 Laser microsurgery

fungal plasma membrane, 1569 Leaf-cutting ants symbiotic fungus, 4820

Least-squares analysis integrated Monod equation, 2044 Lecithinase

X. nematophilus, 2367
Legionella micdadei
invasion of protozoa, 3134
Legionella pneumophila
Acanthamoeba vesicles, 279

invasion of protozoa, 3127 specific detection, 2686 uptake by protozoa, 126 Legionella spp.

amoebae that harbor, 1688 Legumes

bradyrhizobial LPS profiles, 902 Canary Island *Bradyrhizobium* strains, 2096

Leguminous trees nodA and nifH in tree rhizobia, 419
Leloir pathway
L. casei gal genes, 2013

Length heterogeneity analysis by PCR coastal picoplankton diversity, 4522 Leptomycin B

microbial conversion products, 714 Leptospirillum ferrooxidans chemoreceptor gene, 2380

Lethality uncoupling from protein release, 392 Letters to the Editor

C. parvum oocyst viability, 3544 M. tuberculosis and pasteurization, 2760 leu2

cloning and transformation, 2624 Leucoagaricus gongylophorus plant polysaccharide metabolism, 4820 Leuconostoc carnosum

ham spoilage, 3313

Leuconostoc mesenteroides
dextransucrase activities 1298
dextransucrase C-terminal deletions, 1644

Leuconostoc spp. citrate transporters, 1594 dextran-producing strains, 3096 silage fermentation, 2982

Levansucrase genes cloning, expression in *E. coli*, 3180 L-form cells

scFv antibody expression, 4862 Lichens

symbiotic cyanobacterium diversity, 310 Light-mediated nitrite accumulation *Pseudomonas* denitrification, 813

Lignin kraft pulp delignification, 2117 manganese peroxidase effects, 2273 screening of degraders, 1548 Lignin peroxidase anisyl alcohol oxidation, 830 P. chrysosporium, 3536

Ligninolytic enzymes
P. chrysosporium, 3536
P. flavido-alba, 2726
Lignin-related biphenyl
S. paucimobilis oxygenase, 2520

Linenscin OC2

mode of action against *L. innocua*, 3416 Lipases *Pseudomonas* sp., 486 recombinant *P. alcaligenes*, 2644

Lipid composition effect of growth pressure, 479 pediocin PA-1 binding, 3530

Lipid synthesis *B. japonicum*, 1963
Lipopolysaccharides

bradyrhizobia in wild legumes, 902 Sinorhizobium spp., 4930

Listeria innocua linenscin OC2 effect, 3416

Listeria monocytogenes competitive growth modeling, 3159 control in Cheddar cheese, 4842 monoclonal antibody probes, 3070 morphology and thermotolerance, 2065 nisin resistance, 231 oligopeptide utilization, 1059 ptsH and ptsI cloning, 3147

Livestock mycotoxins in feed, 3923 toxic endophytic fungi, 601

toxic endophytic fungi, 601 LlaDII lactococcal R/M system, 2424

Long tandemly repeated repetitive sequences

fingerprinting of cyanobacteria, 265 Long-chain fatty acids bioconversion, 3784 Low-molecular-weight RNA profiles Rhizobiaceae, 1555

Low-osmolality nutrient media effect on Campylobacter spp., 4643 lppC

S. equisimilis acid phosphatase, 2439 Luciferase genes digestive tract bacteria, 2721

Luminous bacteria association with squid, 805 squid-bacterium symbioses, 3209

lux genes toxic chemical detection, 4346

Lycopene improved production, 2676 production by *C. utilis*, 1226

Lyme borreliosis differential transmission, 1169 geographic risk in New York, 4663 Ixodes ticks do not inherit, 3089 northeastern China, 2705 spirochete diversity, 1980 susceptibility of mice, 4596 Lysis

P. putida, 4904 Lysogenic bacteria seasonal abundance in estuaries, 2308 Lysogeny temperate phage-host systems, 535 Lytic bacteriophages broad host range prevalence, 575

Macrophytes bacterial CO oxidation, 4939 rhizosphere diazotroph diversity, 4276 root-associated methanotrophs, 1099 Magnetic capture-hybridization PCR verotoxigenic *E. coli*, 147

Maize *P. azotofixans* diversity, 3860
Major cold shock proteins

psychrotrophic *B. cereus*, 3525 Male-specific bacteriophage

aquatic environment impact, 5027 Maltose-binding protein pediocin AcH chimera secretion, 14

Mammut americanum bacterial isolates, 651 Manduca sexta

high-affinity Cry1A receptor, 2158 insecticidal toxin effects, 3036

Manganese ABTS radical reduction, 2026 biobleaching of kraft pulp, 2409 Manganese oxidation

P. putida, 3549, 3556
Manganese peroxidase
decolorized olive oil mill waste, 2726
effects on residual lignin, 2273
gene family regulation, 569
H₂O₂ production by C. subvernispora, 68
industrial dye transformation, 2788
N. frowardii, 399

P. chrysosporium, 3536
Manganese reduction
Loke Vende (Anteretice) mirror

Lake Vanda (Antarctica) microbes, 3791 Mannanase

S. rolfsii, 594 β-Mannanase

B. stearothermophilus, 4428 Manure

E. coli O157:H7, 3166 Mariana Trench, Challenger Deep extremely barophilic bacteria, 1510

Mariculture S. iniae, 4065

Marine bacteria algicidal bacteria, 2806 Alteromonas chitinase, 472 Bacillus spore Cu(II) adsorption, 1123 biofouling, 1246

fish digestive tracts, 2894 horizontal plasmid transfer, 2670 kinetics and characteristics, 4467

PAH degradation, 4703 plasmid diversity, 2822 Sphingomonas spp., 4433 tagging with GFP, 2554

Marine cyanophages PCR detection, quantification, 2051 Marine diazotrophic cyanobacteria nitrogenase localization, 3052

Marine environment agarolytic *Pseudoalteromonas* isolate, 4378 C and N contents of bacteria, 3352 *C. perfringens* distribution, 2596 gene transfer, 2780 *Prochlorococcus* growth, 1066 temperate phage-host systems, 535 *V. vulnificus* biotypes, 7

Marine fosmid library Planctomycetales clones, 3075 Marine invertebrates symbiotic Thiothrix spp., 3491 Marine sediments

nucleic acid quantification, 3238 Markers bradyrhizobia in wild legumes, 902

bradyrhizobia in wild legumes, 902 substrate usage, 4202 Masonry

methanotrophs, methanogens, 4530 Mastitis pathogens inhibition by bacteriocin, 2287

Mastodon remains bacterial isolates, 651

Mating type
F. subglutinans f. sp. pini, 2094
Mayonnaise

Shigella detection, 1242 McMurdo Station, Antarctica C. perfringens distribution, 2596 fecal sterols from sewage, 2596

fecal sterols from sewage, 2596 Meat antibotulinal bacteriocin, 4757 Meat processing plants

Campylobacter isolates, 2346
Media
B. cereus growth, 1075

B. cereus growth, 1075
Campylobacter and low osmolality, 4643
detection of sulfate reducers, 1700
L. delbrueckii polysaccharide production,
1333

L. mesenteroides dextransucrase, 1298 Methanosarcina spp., 768 optimized exopolysaccharide production, 659 V. vulnificus, 2701

V. vulnificus, 2701 V. vulnificus isolation, 1721

Medium composition

Thermococcus compatible solute accumulation, 3591

Melissococcus pluton
PCR detection in honeybees, 1983
Membrane filtration

enumeration of enterococci, 678 versus multiple-tube fermentation, 3079

Membrane H⁺ conductance neutrophiles and alkalophiles, 1344 Membrane lipids

effect of growth pressure, 479
Membrane potential

bacteriocin mode of action, 439 Memnoniella echinata

toxin production, 3620 Mercuric reductase gene expression aquatic environments, 695

Mercury uptake by *E. coli*, 4068 Mercury metal vapor bacterial oxidation, 1328 Mercury methylation anoxic lake sediments, 101

anoxic lake sediments, 1013 sulfidogens, methanogens, 1987 Mercury resistance plasmids

soil bacteria, 1210
Streptomyces strains, 3383
Mesophilic B. cereus

detection, 3525 Mesophilic hosts

Mesophilic hosts psychrophilic gene expression, 1163 Mesorhizobium spp. nodA and nifH genes, 419 Metabolic engineering carotenoid production, 2676

synthetic promoters, 82 Metabolic load

fitness of modified pseudomonad, 2634 Metabolism

Metabolism
BTX in soil, 4924
C. beijerinckii and glucitol, 1612
chloromethane, 1933
DDT residues, 2141
glutamate, by L. lactis, 2485
methionine, 3320
plant polysaccharides, 4820
2,4,5-T, 2086
TNT, 246
toluene, 1650
trehalose, 4614
Metabolites

effects on *T. harzianum*, 5053 Metal extraction bioleaching control system, 455

bioleaching control system, 4555 enzymatic recovery of Pd⁰, 4607 *Thiobacillus* strains, 1237 Metal reductase activity

cytochrome c_7 , 1308 Metal sorption *M. aeruginosa*, 1545 Metal toxicity

PAH biodegradation, 4610 Metal-chelating adsorbents PAH biodegradation, 4610 Metal-EDTA complexes

biodegradation, 1319 Metal-electrolyte interfaces bacterial films, 3690

Metal-rich sludge effect on soil microbial community, 238 Metarhizium anisopliae

pH and enzyme production, 709
Methane

biodegradation, 1106 consumption by forest soils, 2397 measurement in rice paddies, 864 uptake by methanotrophs, 1143

Methane oxidation atmospheric methane, 1091, 4291 M. trichosporium, 253 monoterpene effect, 520 N₂ effects on TCE degradation, 3451

NH₄⁺ inhibition, 4291 Methanococcus jannaschii inositol monophosphatase, 2609

Methanogenesis rice root-associated archaea, 4983 Methanogenic conditions

benzene degradation, 1937 Methanogenic granular sludge carbon tetrachloride degradation, 2350 Methanogens

anoxic rice paddy soil, 960 masonry, 4530 mercury methylation, 1987 Methanol

atmospheric methane oxidation, 1091 Methanol-containing media

Methanosarcina spp., 768 Methanosarcina spp. anaerobic incubator, 768 Methanotrophs atmospheric methane oxidation, 1091 copper biochelates, 1115 hydrothermal vent mussels, 370

masonry, 4530 methanol improves methane uptake, 1143 roots of freshwater macrophytes, 1099 *Sphagnum* peat bogs, 922

Methanotrophy inhibition by difluoromethane, 4357 Methionine catabolism by lactococci, 4670 conversion to thiols, 3320

L-Methionine -lyase

B. linens, 3327

Methyl bromide consumption by soil bacteria, 1864 oxidation in natural waters, 4629 removal from soils, 2899

Methylated pectins
R. solanacearum growth, 4918
Methylobacterium strain CM4
chloromethane metabolism, 1933

Methylosinus trichosporium copper biochelate isolation, 1115 methane, TCE degradation, 1106 salt inhibition of methane uptake, 253

Methylotrophic bacteria competitiveness of DCM degraders, 1194 Methyl-substituted naphthalene oxidation S. paucimobilis, 1884

Mice susceptibility to *Borrelia*, 4596 Microbial assemblages in Antarctica

seasonal, spatial variability, 2585 Microbial community analyses chicken GI tract, 4084 PCR-SSCP, 4870 Microbial community changes

perturbed soil, 2739
Microbial community composition

contaminant rDNA sequences, 3110 Microbial community response

PAH contamination, 3422 Microbial community succession compost, 4062 Microbial mats

novel thermophiles, 1680 sulfate-reducing bacteria, 2943 Microbubbles

Microbubbles bacterial response to ultrasound, 3927 Microcosm enrichment

biphenyl-degrading communities, 3014
Microcystis aeruginosa

metal sorption, 1545 Microsclerotia V. dahliae in soil, 3846

Microsporidia confirmation in water, 3332 magnetic bead-PCR detection, 333

Migratory Canada geese
Giardia and Cryptosporidium, 2736

C. burnetii, 4234 L. lactis growth, 4321, 4591 L. monocytogenes thermotolerance, 2065 M. bovis detection, 3099

M. paratuberculosis isolation, 3153
Milk pasteurization

M. tuberculosis survival, letter to the editor, 2760

Milk peptide utilization

L. lactis, 1230

Mineralization

aromatic, aliphatic compounds, 399 benzo[a]pyrene, 2853 3,4-dichloroaniline, 3305 2,6-dichlorophenol, 2566

phosphonoalanine, 2287 white rot fungi and PCBs, 2020

Minireviews

L. pneumophila in protozoa, 3127 luminous bacteria, 805

Minitransposon derivatives genome analysis, 2710

Mitochondrial DNA polymorphisms Agrocybe spp., 4149 P. infestans, 4007

Mitochondrial toxins S. griseus, 4767 valinomycin, 4767

Mixed culture recovery method enteric bacteria in water, 1736

Mixed microbial cultures individual species detection, 4994 VOCs from building materials, 2914

Mixed-culture biofilms in situ gene expression, 721 MLGI

cloning, 385 targeted disruption, 385

Mn(IV) reduction-deficient S. putrefaciens rapid screening techniques, 2716

Mn(IV)-reducing conditions [1,2-¹⁴C]dichloroethene oxidation, 1560 Modeling

C. botulinum time-to-toxicity, 4416

Modified Fenton reaction toxicity to X. flavus, 3759

growth on cakes, 192 thermostable enzymes, 4446 Molecular biological techniques

Molecular biological techniques freshwater nitrification, 3674 Molecular identification methods

T. harzianum on mushroom farms, 133 Molecular typing

Lactobacillus spp., 2418 Monocillin IV

antifungal metabolite, 4482 Monoclonal antibodies

L. monocytogenes probes, 3070 lactococcal bacteriophages, 4255 S. typhimurium flagellar antigens, 5033

Monooxygenases

p-nitrophenol degradation, 2479

Monorden

Monorden antifungal metabolite, 4482

Monoterpenes effect on microbial activity, 520

Montacuta ferruginosa biofilm genetic diversity, 3464

Morocco diversity of rhizobia, 4912

Morphine diversity of rhizobia, 4912

oxidation by *C. didymum*, 4106 Morpholine degradation *M. aurum*, 153

Mycobacterium sp., 159 Morphology

E. faecalis in an oligotrophic microcosm,

xxviii

L. monocytogenes thermotolerance, 2065 Mosquitocidal toxins B. sphaericus, 756, 3910 B. thuringiensis, 3910 Mosquitoes

Cry11B cross-resistance, 4174 insecticidal *B. laterosporus*, 2723 Most-probable-number method

Most-probable-number method detection of sulfate reducers, 1700 Motility

gliding bacteria in biofilm, 4079

R. meliloti and starvation, 1708

mRNA

E. coli viability indicator, 1313 isolation and quantification, 3698 Muconate cycloisomerases

wild type and variants, 3290 Mucus surfaces

Vibrio chemotaxis, 1573 Mulberry psyllid intracellular symbiotic bacteria, 3599

Multicomponent electrolytes electrical double layer properties, 2295

Multiple competitive RT-PCR 16S rRNA quantification, 4581 Multiple-tube fermentation

versus membrane filtration, 3079 Multitemplate PCR

template-to-product ratios, 3724 Munitions manufacturing facilities nitroglycerin, 3300

Mushrooms
Bsn-t alleles, 2105

contaminating *Trichoderma* isolates, 133 interspecific variations of V4, V6, and V9 domains, 4149

Mussels

stable-carbon-isotope compositions, 370 virus detection, 3118

Mutacin II

S. mutans, 2335 Mycobacterium aurum

morpholine degradation, 153

morpholine degradation, 153 Mycobacterium avium

coculture with A. polyphaga, 2256 Mycobacterium bovis

detection in milk, 3099 Mycobacterium paratuberculosis isolation from milk, 3153

thermal tolerance, 999

Mycobacterium spp.
morpholine degradation, 159
4-nitrotoluene degradation, 446

4-nitrotoluene degradation, 446 toluene degradation, 1715 Mycobacterium tuberculosis

pasteurization survival, letter to the editor, 2760

Mycoplasma hyopneumoniae detection in the air, 543 Mycotoxins

beauvericin, 3084 livestock feed, 3923 Myoglobin

exopeptidase inhibitor, 2313

β-N-Acetylglucosaminidase S. thermoviolaceus, 2920 NAD†-dependent malic enzyme B. japonicum, 4073 NADP-isocitrate dehydrogenase P. nautica, 4958 NADP-mannitol dehydrogenase A. bisporus and NaCl stress, 4689 cDNA cloning from A. bisporus, 4689 Naegleria fowleri

genetic variation, 2977 recovery from water, 955 Nanoflagellate grazing

effects of UV-A, 287 groundwater bacteria, 618

Naphthalene biodegradation, 4610

Naphthalene catabolism genes horizontal transfer, 3633

Naphthalene-catabolizing enzymes PCB metabolite degradation, 4637

Natural bacterial assemblages C and N contents, 3352

Nematoloma frowardii manganese peroxidase, 399

Nested PCR

M. hyopneumoniae detection, 543Neural network-based image analysis bacterial biovolume, morphology, growth, 3246

3246

Neurospora crassa
2-nitropropane dioxygenase, 1024

Neutrophiles

buffering capacity, 1344 membrane H⁺ conductance, 1344

Nevskia ramosa phylogeny, identification, 1895 pure culture studies, 1890

New York State
Lyme disease risk, 4663

New Zealand ruminants ammonia-hyperproducing bacteria, 1786

Nickel toxicity to seedlings 3663

toxicity to seedlings, 3663 nifH

genetic diversity, 2770 nitrogen fixers in oceans, 3444 phylogeny in tree rhizobia, 419

nirK and nirS

denitrifying bacterium identification, 3769

nisA promoter gene expression regulation, 2763

Nisin resistance L. monocytogenes, 231

yeast cells, 4047 Nitrate

denitrification in rivers, 2533 removal by *K. oxytoca*, 5016

Nitrate microprofiles diatom-inhabited sediment, 3264

Nitrate reduction European sediments, 4846 P. aerophilum and tungsten, 3004

Nitrate removal K. oxytoca, 2970

Nitric oxide

anaerobic phosphate release in activated sludge, 2925

P. stutzeri denitrification, 3092

Nitrification

diatom-inhabited sediment, 3264 eutrophic lakes, 3674

Nitrification inhibitors sensitive detection, 3656 Nitrification processes

three-compartment activated sludge system, 2528 Nitrifying bacteria

activity estimation, 2266 community structure, 3584 diversity, 3042

Nitrifying fluidized-bed reactors dominant bacterial populations, 3480

AMO activity inhibition in *N. europaea*,

P. stutzeri denitrification, 3092

Nitrite reductase genes denitrifying bacterium identification, 3769

Nitrite-oxidizing bacteria freshwater aquaria, 258 sewage sludge, 1878 Nitrite-oxidizing bioreactors

microbiology, 1878 6-Nitrochrysene

fungal transformation, 3106

Nitrogen metabolism by A. oryzae, 3232

TCE degradation, 3451 Nitrogen content

bacteria in marine environments, 3352 Nitrogen fixation

Australian rhizobia, 3989

B. japonicum NAD⁺-dependent malic enzyme, 4073

Frankia of actinorhizal plants, 3539 maize rhizosphere, 3860

oceans, 3444
P. azotofixans, 3860
Sinorhizobium strain, 1657

Nitrogenase

Trichodesmium spp., 3052 Nitrogenase genes

nitrogen fixers in oceans, 3444 Nitrogen-containing compounds wine fermentation, 3831

Nitroglycerin utilization by mixed culture, 3300

p-Nitrophenol biodegradation, 24792-Nitropropane dioxygenase

N. crassa, 1024
Nitroprusside

C. sporogenes inhibition, 3195 Nitrosococcus mobilis

activated sludge, 3042 Nitrosomonas europaea

ammonia-oxidizing activity, 1514 AMO activity inhibition, 4098 bioluminescence assay, 3656 cosubstrate oxidation, 1372 Nitrosopira spp.

nitrifying bioreactor bacteria, 3480 Nitrospira spp.

nitrifying bioreactor bacteria, 3480 Nitrospira-like bacteria

activated sludge, 3042 freshwater aquaria, 258

4-Nitrotoluene biodegradation pathway, 446 nodA

phylogeny in tree rhizobia, 419 Nodulation

R. etli competitiveness, 2630 Nonglycosylated recombinant glucose oxi-

P. amagasakiense, 1405

Nongrowth energy dissipation S. bovis, 976

Nonthermophilic crenarchaeotes dibiphytanyl ether lipids, 1133

North Sea

bacteriophage diversity, 4128

Nuclear magnetic resonance acenaphthene degradation, 1447 fluorophenol degradation, 1256 fossil fuel degradation, 1447 glycogen futile cycling, 74 lactococcal methionine catabolism, 4670 morpholine degradation pathway, 153

Nucleic acid dyes aquatic bacteria, 1725

Nucleic acid-based detection assays cell viability indicator, 4264

Nucleic acids

marine sediments, 3238

Nucleopolyhedrovirus parasitic genotypes, 4372

Nucleotide sequence

A. trota aerolysin gene, 2473 Bacillus α-amylase gene, 3282 gyrB from V. parahaemolyticus, 681

L. ferrooxidans chemoreceptor gene, 2380 L. plantarum pls locus, 1871

L. rhamnosus pepR gene, 1831 levansucrase genes, 3180 P. chrysosporium leu2, 2624

purDEK from L. lactis, 4321 S. aureus brnQ, 763

T. halophila xyn operon, 2513 L-threonine aldolase gene, 549 toluene/o-xylene monooxygenase gene, 3626

Nylon-degrading enzymes purification, characterization, 1366

O demethylation vanillate and syringate, 836

Oceans nitrogen-fixing organisms, 3444 Octanoic acid-supplemented medium

S. cerevisiae H+-ATPase, 779 Oculina patagonica

Vibrio and coral bleaching, 1379 OLAND system

ammonium removal, 4500 Oligonucleotide probes

cricket hindgut microbiota, 752 E. coli 16S rRNA accessibility, 4973 G. amarae, 2503

individual species detection, 4994 L. pneumophila, 2686 natural bacterial communities, 185

protozoan grazing, 1264 toxic cyanobacteria, 2639

Oligopeptides utilization by L. monocytogenes, 1059 Oligosaccharides

synthesis by L. mesenteroides, 1644 Oligotrophic microcosms

E. faecalis survival, 4238 Oligotrophic oceans

nitrogen-fixing organisms, 3444 Oligotrophic ultramicrobacteria

ribosome content, 4433 rRNA operon copy number, 4433 Olive oil mill wastewaters

P. flavido-alba, 2726

O-Methyltransferase I A. parasiticus, 166

Oocysts

detection in drinking water, 2278 freshwater clams, 427 inactivation by ammonia, 784 sensitive and rapid detection, 1743 survival in seawater and oysters, 1070

Oral bacteria anaerobic damage by Fe and Cu, 27 chlorhexidine susceptibility, 3515

aflatoxin biosynthesis, 4834

Organic acids

ABTS radical reduction, 2026 biobleaching of kraft pulp, 2409 catabolite repression, 1

Organic matter

Ross Sea sediment, 3838

Organic solvents

cholesterol oxidase purification, 1929

Organophosphate utilization E. coli K-12, 2601

Origin of transfer lactococci, 1541

ortho-cleavage degradation pathway toluene, 748

Osmoprotection H. elongata, 4095 S. meliloti, 1420

Osmoregulation fungi, 607

Osmotic signals gpdA promoter activation, 2229

Osmotic strength R. meliloti cyclic glucan synthesis, 1290

Osmotic upshock halotolerant Brevibacterium sp., 3641

Osmotolerance P. fellutanum, 273

Oxalic acid oxidation

MnP-dependent H2O2 production, 68 Oxidation

dibromomethane, 4629 methyl bromide, 4629

Oxidative damage oral streptococci, 27 Oxidative radical species

reduction by organic acids, 2026

B. japonicum lipid synthesis, 1963 katA expression regulation, 1359 P. aeruginosa biofilm heterogeneity, 4035

Oxygen concentration nitrifier community structure, 3584

Oxygen consumption Desulfovibrio strains, 1034

Oxygen regulation S. cerevisiae culture, 1040

Oxygen sensitivity D. vulgaris, 2882

Oxygen uptake

nitrifying bacterial activities, 2266 Oxygenase

S. paucimobilis gene cloning, 2520 Oxygen-insensitive methane microsensor rice paddy methane, 864

Oxygen-limited autotrophic nitrificationdenitrification ammonium removal system, 4500

Oxytetracycline

resistant A. salmonicida, 4194

Oysters

C. parvum oocysts, 1070 V. vulnificus, 1459 V. vulnificus phages, 346 Ozone depletion

brominated methane oxidation, 4629

Paenibacillus azotofixans diversity of maize strains, 3860 nifH genetic diversity, 2770

Palladium

enzymatic recovery, 4607

Pantoea agglomerans

EPS production on wheat roots, 3740 gallic acid decarboxylase, 4743

pap operon

pediocin AcH secretion, 14

Parallel evolution

squid-bacterium symbioses, 3209

Paramagnetic beads

toxic cyanobacterium detection, 34 Parathyroid hormone

high-level production, 526

Particulate methane monooxygenase

methane, TCE degradation, 1106 Pasteurization

fruit juice and E. coli, 1566

milk, letter to the editor, 2760 Pathogenesis

L. pneumophila, 3127 Pathogenicity

Shiga-like-toxin-producing E. coli, 4134 V. alginolyticus, for fish, 4269

pcbAB (acvA)

penicillin biosynthesis gene, 843

PCR

B. distasonis in river water, 4103 bacterium-specific primers, 795 bias in template-to-product ratios, 3724

bovine C. parvum analysis, 2262 C. burnetii detection, 4234 C. parvum detection limits, 2281

C. parvum identification, 1454 proteoclasticum, 907

Canary Island Bradyrhizobium strains,

cyclic lipodepsinonapeptide producers, 226 date palm pathogen, 633

denitrifying bacterium identification, 3769 direct in situ detection, 1536

E. coli O157:H7, 1640 fingerprinting of cyanobacteria, 265

fish pathogen detection, 3066 honeybee larva pathogen, 1983

inhibition by RT, 669 inhibition prevention, 3748

M. bovis detection in milk, 3099 M. pluton, 1983

marine cyanophage detection, 2051

microsporidia, 333 Phytophthora species identification, 948 Pseudomonas 16S rRNA gene detection,

2545 shiga toxin-producing E. coli, 2449 Shigella spp. in mayonnaise, 1242 watermark disease of willows, 3966

microbial community analysis, 4870 PCR-based DNA amplification E. coli O157:H7 detection, 3389

PCR-based DNA test enterotoxic B. cereus, 1634 PCR-detectable DNA differentiation of Campylobacter isolates, PCR-ribotyping Xenorhabdus, Photorhabdus spp., 4246 PCR-SSCP microbial community analysis, 4870 nDTG1 naphthalene catabolism genes, 3633 Peat bogs acidophilic methanotrophs, 922 Pectin methylesterase R. solanacearum, 4918 Pediocin AcH chimeric protein mutants, 1997 secretion of chimeras by E. coli, 14 Pediocin PA-1 binding to lipid vesicles, 3530 inhibition, 5057 polyclonal antibodies, 4536 production by L. lactis, 818 Pediocin-producing starter cultures L. monocytogenes control, 4842 Pediococcus spp. pediocin AcH, 14 Pelagic bacteria high mountain lake, 4299 kinetics and characteristics, 4467 Penicillin biosynthesis A. nidulans and acvA (pcbAB), 843 Penicillium amagasakiense nonglycosylated recombinant glucose oxidase, 1405 Penicillium digitatum ABC transporter and drug resistance, 3983 Penicillium fellutanum osmotolerance, 273 Penicillium purpurogenum α-galactosidase cDNA cloning, 4489 Penicillium roqueforti PR oxidase, 5012 Pentacyanonitrosyl complexes C. sporogenes inhibition, 3195 Pentaerythritol tetranitrate reductase TNT degradation, 2864 pepP genetic characterization, 4591 pepR L. rhamnosus prolinase, 1831 Peptide deformylase C. beijerinckii, 1780 Peroxidases wood-rotting fungi, 1601 Perturbed agricultural soil microbial community changes, 2739 Pesticide treatments metabolic, genetic fingerprinting, 2814 Petroleum-contaminated aquifers benzene degradation, 775, 1937

pH

Phaffia rhodozyma

E. coli growth modeling, 1773

L. lactis lactose metabolism, 2111

M. anisopliae enzyme production, 709

survival of PAH degraders in soil, 359

rpL41 as drug resistance marker, 1947

methane consumption by soils, 2397

nitrifier community structure, 3584

Phanerochaete chrysosporium β-glucosidase, 2748 3,4-dichloroaniline mineralization, 3305 leu2 cloning, 2624 Mn peroxidase gene regulation, 569 mRNAs in wood, 1924, 3536 Phanerochaete flavido-alba decolorized olive oil mill waste, 2726 ligninolytic enzymes, 2726 Pharmaceutical plant wastewater Acinetobacter antibiotic resistance, 3499 Phase variation X. nematophilus, 1188 Phaseolus vulgaris phylloplane bacterial gene transfer, 1902 Phellinus pomaceus chloromethane emission, 2831 Phenanthrene-degrading bacteria humic acid and clay effect, 3123 intertidal sediments, 2560 Phenol hydroxylase TCE degradation, 4353 Phenol-degrading bacteria detection in activated sludge, 4396 isolation, characterization, 2424 population dynamics in sludge, 1203 R. eutropha, 1 Phenolic acid decarboxylase gene cloning, analysis, expression, 1466 Phenylalanine conversion to benzaldehyde, 3009 phnE organophosphate utilization, 2601 Phosphate removal from wastewater, 992 S. bovis energy spilling, 976 Phosphate starvation alkaline phosphatase expression, 1526 T. ferrooxidans, 4990 Phosphatidylinositol biosynthesis B. japonicum, 1963 Phosphite utilization by K. aerogenes, 3754 Phosphoenolpyruvate phosphomutase phosphonoalanine mineralization, 2287 Phospholipid fatty acids microbial community succession in compost, 4062 Phospholipid vesicles pediocin PA-1 binding, 3530 Phosphonate utilization by K. aerogenes, 3754 Phosphonoalanine mineralization by B. cepacia, 2287 Phosphonomycin degradation by R. huakuii, 356 Phosphotransferase system ptsH and ptsI from L. monocytogenes, 3147 Photometric application of Gram stain aquatic bacterial population analysis, 742 Photorhabdus luminescens insecticidal toxins, 3029, 3036 small-colony variant, 3214 Photorhabdus spp. Caribbean isolates, 4246 Photosynthetic bacteria deep-ocean hydrothermal vent, 337 stressed Synechococcus sp., 3893 Phthalate biodegradation, 4711

Phylloplane gene transfer, 1902 Phyllosphere biofilms, 4789 Phylogenetic diversity Oregon coastal bacterioplankton, 294 plastid SSU rRNA genes, 294 biodegradable plastic degraders, 5008 N. ramosa, 1895 rhizobia from Acacia spp., 4912 Phytase B. subtilis, 2079 Phytase gene T. lanuginosus, 4423 Phytopathogens Agrobacterium spp., 3977 C. carbonum, 1497 chestnut blight fungus, 2988 crown gall, 3977 date palms, 633 fungi and plant defenses, 2386 levansucrase genes, 3180 P. digitatum drug resistance, 3983 P. infestans, 4007 P. syringae, 3948 P. syringae levansucrase, 3180 Phytophthora species identification, 948 phytoplasma-directed plantibodies, 4566 quantification in soil, 3846 R. fascians rmB operon, 1276 R. solanacearum, 4546, 4918 R. solani, 3939, 4015 tobamoviruses, 1430, 1436 turf grass, 4015 V. dahliae, 3846 watermark disease of willows, 3966 X. oryzae pv. oryzae, 1663 Phytophthora infestans mtDNA polymorphisms, 4007 Phytoplasma-directed plantibodies engineering, 4566 **Phytotoxins** microbial utilization, 4313 Picea rubens Sarg. tobamoviruses, 1430, 1436 Pichia stipitis alcohol dehydrogenase genes, 1350 pyruvate decarboxylase genes, 94 Pig feces drug-resistant E. coli measurement, 366 Pink-filament-forming bacteria T. ruber gen. nov., sp. nov., 3576 expression in L. lactis, 4736 Piscirickettsia salmonis detection in salmonids, 3066 pKW301 arsenic resistance, 411 Planctomycetales marine fosmid library, 3075 Planktonic archaeal assemblages seasonal, spatial variability, 2585 Plant growth-promoting bacteria nickel toxicity reduction, 3663 Plant polysaccharides metabolism by L. gongylophorus, 4820 Plant surfaces biofilms, 4789 Plantaricin C production by L. plantarum, 3512

xxxi

Plantaricin S
molecular analysis of locus, 1871
Plantaricins EF and JK
new two-peptide bacteriocins, 2269
Plant-microorganism interactions
S. meliloti and alfalfa roots, 3954
Plasmid stability
Y. enterocolitica, 1812
Plasmid transfer
bacteria in soil microarthropods, 2652
marine bacteria, 2670
Plasmids
arsenic resistance, 411
desulfurizing Rhodococcus strain X309,
4363

4363
E. coli silver resistance, 5042
gene transfer in wheat rhizosphere, 880
lactococci and bacteriophage resistance,
4618

marine sediment bacteria, 2822 mercury resistance, 1210 naphthalene catabolism genes, 3633 oxytetracycline-resistant *A. salmonicida*, 4194

P. syringae, 3948 Pseudomonas atzABC genes, 2323 type II R/M system cloning, 2424 Plasmin-resistant streptokinase

B. subtilis, 824 Plasposons genome analysis, 2710

Plastid SSU rRNA genes phylogenetic diversity, 294

Pleurotus eryngii industrial dye transformation, 2788 wheat straw degradation, 325

wheat straw degradation, 325 Pleurotus ostreatus fruit-body-specific hydrophobin, 4028

Plutella xylostella B. thuringiensis toxins, 1385 Poliovirus

detection in mussels, 3118 Poly(3-hydroxybutyrate) biosynthesis E. coli, 4897 Polychlorinated biphenyls

anaerobic dechlorination, 2966 biodegradation, 2006, 4823 congener degradation, 2020 dechlorination, 1786 detection with reporter strain, 5023 metabolite biodegradation, 4637

Polyclonal antibodies pediocin PA-1, 4536

Polycyclic aromatic hydrocarbons biodegradation, 356, 359, 1447, 4180, 4610, 4703

microbial community response, 3422 Polyester

degradation by *T. fusca*, 1731 Polyester polyurethane-degrading enzymes *C. acidovorans*, 62

Polygalacturonases *C. carbonum*, 1497 Polyglucose

Desulfovibrio oxygen consumption, 1034 Polyhydroxyalkanoate biosynthesis A. latus, 4897

Polyhydroxyalkanoate synthase C. acidovorans, 3437 Polyhydroxybutyrate synthesis Rhizobium strain, 2859 Polyphosphate kinase Acetobacter ppk transcription, 896 Polyurethane degradation by C. acidovorans, 62 Pontederia cordata

root-associated methanotrophs, 1099 Population biology

canavanine effect on *B. cereus*, 4683 Population dynamics activated sludge, 1203

high mountain lake, 4299 phenol degraders in sludge, 1203

Population size plant surface biofilms, 4789 Porin proteins

expression in *V. anguillarum*, 138 Potomac horse fever

E. risticii detected in snails, 2888

Poultry
C. jejuni, 1816
ppk transcription

phosphate starvation, 896

P. syringae, 3948 PR oxidase

P. roquefortii, 5012

Predation nanoflagellates and groundwater bacteria,

618
Pressure

B. subtilis spore germination, 3220 effect on lipid composition, 479 L. plantarum inactivation, 509 lethality of ultrasound, 465 Pressure-resistant E. coli mutants

survival in fruit juice, 1566
Prevotella bryantii

amino acid synthesis, 2836 Prevotella spp. restriction enzyme profiling, 368

restriction enzyme profiling, 3683 Probiotics anti-Helicobacter activity, 4573

L. acidophilus, 4573 L. paracasei in Cheddar cheese, 2192 L. rhamnosus strains, 4816

Prochlorococcus spp. ultradian growth, 1066 Prokaryotic mRNA differential display, 3698

Prokaryotic promoters modulation of strength, 82

L. rhamnosus gene, 1831 Proline iminopeptidase gene expression in L. lactis, 4736

Proline-producing mutants T. thermophilus, 4328 Prolyl dipeptidyl peptidase

A. oryzae, 4809

1,3-Propanediol operon

construction, characterization, 98 Prophage-encoded enzymes

L. lactis subsp. cremoris, 4142 Propionibacterium freudenreichii humic acid reduction, 4507

Propionibacterium shermanii pip gene cloning, 4736

Proteases cold-adapted protease engineering, 492 P. fluorescens, 914 Protective antigen B. anthracis, 982

Protein engineering cold-adapted protease, 492 plasmin-resistant streptokinase, 824

Protein production chaperone effects, 1694 Protein release

E. coli, 392 Protein synthesis

E. faecalis in an oligotrophic microcosm, 4238

Proteins expression in *V. anguillarum*, 138 maximizing production, 1812

Proteus mirabilis scFv antibody expression, 4862

Proton efflux

L. plantarum inactivation, 509

Proton motive force S. bovis, P_i, and energy spilling, 976

Protozoa B. thuringiensis growth, 1750 fermentative metabolism, 203 invasion by Legionella spp., 3127, 3134 L. pneumophila uptake, 126

Protozoan bacterivory

E. coli survival in water, 197

Protozoan grazing

attached bacteria, 1264 Protozoan parasites detection by PCR, 333 pRS01

lactococcal conjugative oriT, 1541 Pseudoalteromonas spp. algicidal bacteria, 2806 marine agarolytic isolate, 4378

Pseudomonas acidovorans DDE and DPE cometabolism, 2141 Pseudomonas aeruginosa

lytic bacteriophages, 575 O₂ and biofilm heterogeneity, 4035 Pseudomonas alcaligenes

lipase production, 2644

Pseudomonas chlororaphis
1,2,3,4-:TeCB degradation, 3798

Pseudomonas cichorii
1,3-dichloropropene degradation, 2931

Pseudomonas fluorescens antifungal activity, 3563 cyanide assimilation, 4452 extracellular protease, 914 phenanthrene degradation, 3123 TCE rhizoremediation, 112

Pseudomonas nautica NADP-isocitrate dehydrogenase, 4958 Pseudomonas paucimobilis

vanillate, syringate O demethylation, 836

Pseudomonas putida
cell lysis, 4904

c-type cytochromes, 3549, 3556 field release assays, 2072 individual species detection, 4994 Mn oxidation, 3549, 3556

tod operon induction, 5049 toluene transformation, 748 Pseudomonas spp.

rseudomonas spp.
aerobic α,ω-dichloroalkane degradation,
3507
antifungal strains and AM fungi, 2304
atrazine catabolism, 2323

cholesterol oxidase, 1929
cold-adapted lipase, 486
denitrification, 813
PCR to detect 16S rRNA genes, 2545
styrene degradation genes, 2032
survival after solvent shock, 38
TCE-oxidizing strains, 2454
tellurite resistance, 4040
L-threonine aldolase, 549
Peseudomonas stutzeri

chloroform oxidation, 3023 1,1-dichloroethylene oxidation, 3023 RpoN and denitrification, 3092 TCE oxidation, 3023 toluene/o-xylene monooxygenase, 3023,

3626 Pseudomonas syringae genomic plasticity, 3948 pPT23A-like plasmids, 3948 Pseudomonas syringae pv. glycinea levansucrase genes, 3180

Pseudomonas syringae pv. phaseolicola levansucrase genes, 3180 Pseudomonas syringae pv. syringae cyclic lipodepsinonapeptide, 226 stone fruit trees, 3818

Pseudomonas syringae pv. tomato genospecies III genetic diversity, 1180 pSOX

desulfurization plasmid replicon, 4363

PspGI

thermostable restriction enzyme, 3669 Psychrophilic gene expression

mesophilic hosts, 1163 Psychrotolerant bacteria PCB degradation, 4823

Psychrotrophs alkane degradation, 2578 B. cereus detection, 3525 cold-adapted lipase, 486

ptsH and ptsI
cloning and expression, 3147
Pulmonary hemosiderosis

trichothecene mycotoxins, 3620 Pulsed-field gel electrophoresis C. botulinum from trout farms, 4161

C. botulinum from trout farms, 4161 C. botulinum group II, 703 Campylobacter isolates, 2346 purDEK

cloning and expression, 4321 Pure culture studies

N. ramosa, 1890 Purple sulfur bacteria subfossil molecular remains, 4513 Pycnoporus cinnabarinus

laccase gene, 1766 Pyoverdines ferrous iron oxidation, 1472

Pyrite attachment of thiobacilli, 2937 Pyrobaculum aerophilum

tungsten effect, 3004 Pyrobaculum islandicum glutamate dehydrogenase, 2152 Pyrococcus spp.

thermostable restriction enzyme, 3669 Pyruvate decarboxylase

fusel alcohol production, 1303 P. stipitis, 94 S. cerevisiae, 2133 Pyruvylated mannose liberation by xanthan lyase, 3765

Quasi-lysis E. coli protein release, 392 Quinone profiling bacteria in sewage sludge, 992 Quorum sensors

urethral catheter biofilms, 3486

Radish sprouts
E. coli O157:H7, 1532
Ralstonia eutropha
catabolite repression, 1
TCE degradation, 4353

Ralstonia solanacearum detection by FISH, 4546 pectin methylesterase, 4918 Ralstonia spp.

2,6-dichlorophenol mineralization, 2566
Randomly amplified polymorphic DNA
C. parvum analysis, 1954
dextran-producing leuconostocs, 3096
L. rhamnosus strains, 4816
P. syringae pv. tomato diversity, 1180
PCR analysis of C. parvum, 2262
V. vulnificus analysis, 3025, 3403
Raspberries

C. cayetanensis detection, 2284
Raw minced meat
antibiotic-resistant enterococci, 1825

deletion mutagenesis, 2882 Recombinant bacteria high nitrate load removal, 5016 lipase production, 2644 sheep and fluoroacetate poisoning,

sheep and fluoroacetate poisoning, 3496
Recombinant enzymes
folding state assessment, 1163
glucose oxidase, 1405
P. amagasakiense, 1405
Recombinant human hemoglobin
high-fidelity translation, 1589
Recombinant human parathyroid hormone

high-level production, 526 Recombinant protein folding chaperone effects, 1694 Recreational water

enumeration of enterococci, 678 Red spruce trees

tobamoviruses, 1430, 1436 Reduced transition metal ions oral streptococcus killing, 27 Reductive dechlorination

Reductive dechlorination Aroclor 1260, 1052 tetrachloroethene, 1270 trichlorobenzenes, 496

Reductive dehalogenation Aroclor 1260, 1786 brominated biphenyls, 940 chlorophenols, 4603 *D. frappieri*, 4603 Reductive metabolism

2,4,6-trinitrotoluene, 246 Reductive ruminal acetogenesis assessment, 3429

Registered designation of origin Camembert cheese lactococci, 4729 Relatedness

X. fragariae strains, 3961

Renaturing polyacrylamide gel electrophoresis

L. lactis bacteriolytic enzymes, 4142

Repeated sequence RSα B. japonicum, 1845

Repetitive extragenic palindromic PCR Canary Island *Bradyrhizobium* strains, 2096

Residual lignin

manganese peroxidase effects, 2273

Resistance mechanisms
A. salmonicida and oxytetracycline, 4194
E. coli O157:H7 and chlorine, 4658
E. coli and silver, 5042
Pseudomonas spp. and tellurite, 4040
yeast cells and nisin, 4047

Restriction enzymes

Bacteroides and Prevotella profiling, 3683 PspGI from a Pyrococcus sp., 3669

Restriction fragment length polymorphisms Canary Island *Bradyrhizobium* strains, 2096

C. parvum β-tubulin gene, 4477 X. fragariae strain relatedness, 3961 Restriction/modification systems

lactococci, 2424
PspGI from a Pyrococcus sp., 3669

Reverse sample genome probing hydrocarbon degraders, 637 Reverse transcriptase

inhibition of PCR, 669 Reverse transcriptase PCR

viable microorganisms in food, 1157 virus detection in mussels, 3118 virus detection in shellfish, 858

Reverse transcription-PCR 16S rRNA quantification, 4581 E. coli viability indicator, 1313 Mn peroxidase gene regulation, 569 oocyst and cyst detection, 1743

Rhamnaceae

diversity of Frankia strains, 3539 Rhizobia

diversity in Australia, 3989 diversity and phylogeny, 4912 LPS and K antigens, 4930 nodA and nifH phylogeny, 419 wild beans in southern Andes, 3520

Rhizobiaceae LMW RNA profiles, 1555

Rhizobium etli competitiveness, 2630 Rhizobium etli-like allele

rhizobia on beans from Southern Andes, 3520

Rhizobium huakuii

phosphonomycin degradation, 356 Rhizobium leguminosarum bv. trifolii distribution in soil aggregates, 970

Rhizobium meliloti cyclic glucan synthesis. 1290 salt regulation of EPS II, 1024 starvation-induced changes, 1708

Rhizobium spp.

PHB synthesis, 2859
Rhizoctonia solani
biological control, 3939
turf grass disease, 4015
Rhizonine-catabolizing ba

Rhizopine-catabolizing bacteria detection, isolation, 4944 Rhizoremediation trichloroethylene, 112 Rhizosphere bacteria antifungal P. fluorescens, 3563 archaea and rice roots, 4983 bacterial antibiotic effects, 5020 cryptic gene-mobilizing plasmids, 880 dynamics, 4950 EPS production on wheat roots, 3740 maize roots and N2 fixation, 3860 P. azotofixans, 3860 salt marsh diazotrophs, 4276

Rhodococcus fascians rmB operon, 1276

Rhodococcus spp. alkane degradation, 2578 amidase acyl transfer activity, 2844 aromatic hydrolase genes, 2006 benzothiazole degradation, 3270 desulfurization plasmid replicon, 4363 isoprene utilization, 2800

Riboflavin production A. gossypii, 4283 Ribosomal DNA

contaminants in environmental studies, 3110

Phytophthora species identification, 948 Ribosomal protein L41 gene drug resistance marker, 1947

Ribosome content Sphingomonas spp., 4433

Ribotyping V. vulnificus isolates, 3403 Rice hull ash

adsorbent for bacteriocins, 4403

Rice paddies methane measurement, 864 methanogenic community, 960 Rice plants

root-associated archaea, 4983 Riverine microbial community response PAH contamination, 3422

Rivers B. distasonis, 4103 denitrification, 2533 RNA profiles

Rhizobiaceae, 1555

B. burgdorferi transmission, 1169 Root colonization

A. tumefaciens mutants, 2341 P. agglomerans and wheat, 3740 S. meliloti and alfalfa, 3954

Roots archaea of rice plants, 4983 bacterial CO oxidation, 4939 mercury resistance plasmids, 1210 methanotrophs of freshwater macrophytes, 1099

Ross Sea, Antarctica bacterial distribution, 3838 enzymatic activity, 3838 organic matter in sediments, 3838 Rotaviruses

flow cytometry detection, 2392 rpL41 drug resistance marker, 1947 RpoN P. stutzeri denitrification, 3092

16S rRNA accessibility to probes, 4973

human fecal bacteria, 3854 Planctomycetales clones, 3075 rRNA content

Synechococcus growth rate, 3346 16S rRNA genes bacterium-specific PCR primers, 795 crenarchaeotes in soils, 4333 methanogen diversity in rice paddy, 960 microbial community analysis, 4870 PCR to detect Pseudomonas strains, 2545 phylogeny in Netherlands soils, 871 quantification in complex bacterial communities, 4581

restriction enzyme profiling, 3683 2,3,5,6-tetrachlorobiphenyl degraders,

rRNA hybridization probes G. amarae, 2503 rRNA operon copy number Sphingomonas spp., 4433 16S rRNA probes

L. pneumophila, 2686 rRNA stability

nucleic acid-based detection assays, 4264 rRNA-targeted oligonucleotide probes cricket hindgut microbiota, 752 human fecal flora variation, 3336 uncultivated bacillus detection, 4588

mnB operon R. fascians, 1276 Ruminal microorganisms amino acid synthesis, 2836 detection by competitive PCR, 907 reductive acetogenesis, 3429 restriction enzyme profiling, 3683 sheep and fluoroacetate poisoning, 3496 tannin-tolerant bacteria, 3824

Ruminants ammonia-hyperproducing bacteria, 1786 Russia

Lyme borreliosis, 2705

Saccharomyces boulardii cholera toxin-induced signal, 564 Saccharomyces cerevisiae acetic acid and pH_i, 530 acetic acid transport, 665 cholera toxin-induced signal, 564 cutinase production, 316 fermentative capacity, 4226 flow cytometry for detection, 1139 fusel alcohol production, 1303 α-galactosidase gene expression, 4489 H+-ATPase, 779 heterologous protein expression, 793 homothallic strain hybrids, 5039 isoamyl acetate production, 4076 oxygen regulation in culture, 1040 pyruvate decarboxylase overproduction, 2133 vital staining and detection, 1139 wine fermentation, 3831 Saccharomyces sensu stricto

new hybrids, 3887 Saccharomyces spp. recombinant xylose fermenters, 1852

Saccharopolyspora erythraea sonication-dependent electroporation,

Sagittaria latifolia root-associated methanotrophs, 1099 Sake flavor development, 4076

Salinity survival of PAH degraders in soil, 359

Thermococcus compatible solute accumulation, 3591

V. vulnificus in oysters, 1459 Salix spp. (willows)

watermark disease agent, 3966 Salmonella choleraesuis

sensitization to AS-48, 4623 Salmonella enterica serovar Enteritidis more-virulent variants, 2166

Salmonella enteritidis biphasic thermal inactivation, 459 Salmonella typhimurium

detection in animals, 5033 MAbs to flagellar antigens, 5033 SCFA-induced acid resistance, 3458 self-destruction, 1323

Salmonids P. salmonis detection, 3066 Salt

EPS II regulation in R. meliloti, 1024 methane oxidation by M. trichosporium, 253

Salt marsh fungi DMSP lyase activity, 1484 Salt marshes

H. halophilus, 3813 rhizosphere diazotroph diversity, 4276 scFv antibody

phytoplasma-directed plantibodies, 4566 Sclerotial development

S. sclerotiorum and cAMP, 2539 Sclerotinia sclerotiorum

cAMP and sclerotial development, 2539 Sclerotium rolfsii

endoglycanase induction, 594 Screening methods

E. coli O157:H7 in beef, 4390 exopolysaccharide-deficient mutants, 4600 fish and fish pathogens, 3066 lignin degraders, 1548 microorganisms with antiviral activity,

Mn(IV) reduction mutants, 2716 Sea grass

antibiotic metabolite, 1490 Seasonal abundance

lysogenic bacteria in estuaries, 2308 Seasonal and spatial variability Antarctic microbial assemblages, 2585

Seawater marine isolate kinetics, 4467 V. vulnificus isolation, 1721

Secondary metabolites A. terreus, 3707

Secretory protein maturation, stability B. subtilis, 2875

T. reesei, 3202 Sediment

anaerobic benzene degradation, 775 Aroclor 1260 dechlorination, 1052 Aroclor 1260 dehalogenation, 1786 bacterial enumeration, 5000 bacterial plasmid diversity, 2822 benzene degradation, 1937 biphenyl-degrading communities, 3014 brominated biphenyl dehalogenation, 940 D. sulfoexigens sp. nov., 119

Hg methylation, demethylation, 1013 iron-oxidizing bacteria, 4846 microbial community composition, 2691 nitrate microprofiles, 3264 nitrate-reducing bacteria, 4846 nucleic acid quantification, 3238 phenanthrene degradation, 2560 purple sulfur bacterium remains, 4513 Ross Sea organic matter, 3838 sulfur disproportionation, 119 Thiomicrospira distribution, 4650 V. vulnificus isolation, 1721 Sedimentation velocity cysts and oocysts, 4460 Sediment-free PCB dechlorination 2,3,5,6-tetrachlorobiphenyl, 2966

Seedlings nickel toxicity reduction, 3663 Selection markers tellurite resistance, 4040

Selenomonas ruminantium amino acid synthesis, 2836 Semipermeable membranes

electrical double layer properties, 2295 Sepiolid squid

symbiotic luminous bacteria, 3209 Sequence polymorphism *C. parvum* β-tubulin gene, 4477

Sequential random mutagenesis cold-adapted protease engineering, 492

Serine acetyltransferase

E. coli cysteine, cystine production, 1607
Serotyping

Campylobacter isolates, 2346

Sewage

Sewage
hepatitis E virus, 4485
nitrite oxidizers, 1878
phages that infect E. coli O157:H7, 2443
Sewage water treatment plants

Sewage water treatment plants

E. faecalis gene transfer, 626

Sheep

protection from fluoroacetate poisoning, 3496 Sheep blowfly larvae

Cyt protein effect, 4060 Shellfish

viruses, 3376, 5027 Shewanella putrefaciens Mn(IV) reduction mutants, 2716

Shiga toxin 2 E. coli O157:H7 phages in sewage, 2443 Shiga toxin-producing E. coli

detection in food, 4210 hemolysin variants, 2449

Shiga-like-toxin-producing *E. coli* EHEC hemolysin, 4134 Shigella spp.

detection in mayonnaise, 1242 Short tandemly repeated repetitive sequences

fingerprinting of cyanobacteria, 265 Short-chain fatty acids

S. typhimurium acid resistance, 3458 Shrimp

V. parahaemolyticus detection, 681 Sick building syndrome

airborne actinomycete spores, 4410 microbial growth on building materials, 2914

mitochondrial toxin, 4767

P. stutzeri denitrification, 3092

Signal transduction

L. micdadei invades H. vermiformis, 3134

Silage fermentation leuconostocs and Weissella, 2982

Silicic acid

adsorbent for bacteriocins, 4403

Silver resistant E. coli, 5042

Simulated acid rain

soil microbial community effects, 2173 Single-chain antibody

B. cereus spores, 2490, 2497

Single-chain variable-fragment antibody phytoplasma-directed plantibodies, 4566 procaryotic expression, 4862

Single-ion-channel resolution fungal plasma membrane, 1569

Sinorhizobium fredii LPS and K antigens, 4930 Sinorhizobium meliloti

alfalfa root colonization, 3954 LPS and K antigens, 4930

osmoprotection, 1420 stachydrine utilization, 3954

Sinorhizobium spp. nodA and nifH genes, 419 transposable partitioning locus, 1657

Site-directed mutagenesis

B. sphaericus toxins, 756

Sludge-amended soil phthalate ester degradation, 4711 Small, acid-soluble proteins

B. subtilis spore alkylation, 1958
Small bacteria

biomass determination, 3900 Small round-structured viruses

detection in shellfish, 858 Small-colony variants P. luminescens, 3214

Small-scale DNA sample preparation cell and spore detection, 2463

Small-subunit rRNA genes diversity in ultraplankton, 294 identification of *Agrocybe* spp., 4149 kingdom *Korarchaeota*, 5064 picoplankton diversity estimates, 4522

S-methylated compounds
S. meliloti osmoprotection, 1420

Potomac horse fever bacterium, 2888

Sodium chloride

A. bisporus enzyme expression, 4689

Sodium nitroprusside C. sporogenes inhibition, 3195

Soft rot diseases C. carbonum, 1497

Softwood kraft pulp manganese peroxidase and lignin, 2273

ammonia oxidizer analysis, 2958 atmospheric isoprene consumption, 172 atmospheric methane consumption, 2397 atmospheric methane oxidation, 1091, 4291

bacterial enumeration, 5000 biphenyl-degrading communities, 3014 BTX metabolism, 4924

C. parvum detection limits, 22813-chlorobenzoate degraders, 1620

crenarchaeote diversity, 4333 detection of cells and spores, 2463 fungal activity measurement, 613 hydrocarbon degraders, 637 infectious tobamoviruses, 1430

maize roots and N₂ fixation, 3860 methyl bromide removal, 2899

microbial community changes, 2739
N. europaea cosubstrate oxidation, 1372
P. azotofixans diversity, 3860

phylogeny of bacterial 16S rRNA sequences, 871

Pseudomonas strains and solvent shock, 38 R. leguminosarum distribution, 970 streptomycin biosynthesis, 5061 survival of PAH degraders, 359 V. dahliae microsclerotia, 3846 virus adsorption, transport, 405

Soil aggregation rhizosphere, 3740

Soil bacteria acid rain effects, 2173 Hawaii, 1283

methyl bromide consumption, 1864 pesticide treatment fingerprinting, 2814 self-transmissible mercury resistance, 1210

Soil microarthropods bacterium plasmid transfer, 2652 gut microbiology, 2660

Soil microbial community metal-rich sludge effect, 238 rRNA characterization, 1283

Solar Lake sulfate-reducing bacteria, 2943

Soluble iron reduction thermophilic iron oxidizers, 2181

Soluble methane monooxygenase
M. trichosporium, 1115

Solvent production

C. beijerinckii, 1780

E. coli, 1079

Solvent shock

Pseudomonas strain survival, 38 Somatic coliphages

treated wastewater, 4307 Somatic hybrids

entomopathogenic fungi, 88 Sorbitol-based vector

heterologous protein expression, 793 Sourdough fermentation

microflora growth modeling, 2616 Sparganium eurycarpum

root-associated methanotrophs, 1099 Sparus aurata L.

V. alginolyticus, 4269 Vibrio chemotaxis, 1573

Spatial heterogeneity

P. aeruginosa in biofilms, 4035

Species composition changes monitored by DGGE, 5046 Specific affinity

marine isolate kinetics, 4467

Specific growth rate
S. cerevisiae fermentative capacity, 4226
Sphaerotilus natans

lytic bacteriophages, 575
Sphagnum peat bogs

acidophilic methanotrophs, 922

Sphingomonas paucimobilis methyl-substituted naphthalene oxidation, 1884 oxygenase gene cloning, 2520 vanillate, syringate O demethylation, 836 *Sphingomonas* spp.

ribosome content, 4433

rRNA operon copy number, 4433 Spodoptera exigua

nucleopolyhedrovirus, 4372

Spodoptera littoralis insecticidal crystal proteins, 1563

Spores

actinomycetes, airborne, 3807 B. subtilis, 1958, 4109

B. thuringiensis, 1750
Bacillus spore Cu(II) adsorption, 1123
pressure-induced germination, 3220
single-chain antibody, 2490, 2497

Sporulation

aquatic hyphomycetes, 1522 Squid

symbiotic luminous bacteria, 805, 3209
Stable-carbon-isotope compositions
fatty acids in mussels with endosymbionts,
370

STAB-SD sequence Cry3A yield optimization, 3932 Stachybotrys chartarum

toxin production, 3620 Stachydrine utilization

S. meliloti, 3954 Staining methods

arbuscular-mycorrhizal fungi, 5004 bacterial viability, 2697

Standing freshwater plant litter decomposition by fungi, 607

Staphylococcus aureus cell viability indicator, 4264 lantibiotic activity, 4803 salt-sensitive mutants, 763

Staphylococcus aureus protein A anchor L. lactis surface display, 342

Starved microorganisms

Acetobacter ppk transcription, 896
changes induced in R. meliloii, 1708

E. coli O157:H7 chlorine resistance, 4658
methanotrophs and methane uptake, 1143
T. ferrooxidans and phosphate, 4990

Stereo- and regioselective hydroxylation α-ionone, 3878

Sterigmatocystin gene expression A. parasiticus, 2275

Stolbur phytoplasma antibody engineering, 4566

Stone fruit trees *P. syringae* pv. syringae, 3818

Stone surfaces methanogens, 4530

Streams toluene degradation, 1715

Streptavidin-conjugated single-chain antibody

B. cereus spores, 2497 Streptococcus bovis

amino acid synthesis, 2836 proton motive force and P_i, 976 Streptococcus equisimilis

lppC-encoded acid phosphatase, 2439 Streptococcus iniae

transmission to cultured fish, 4065 Streptococcus mutans

gene replacement strategy, 2335 lantibiotic mutacin II, 2335 Streptococcus pneumoniae insertion-duplication mutagenesis, 4796

Streptococcus sanguis effect of amine fluorides, 3503

Streptococcus thermophilus capsular EPS role in cheese moisture,

Streptokinase

production by B. subtilis, 824

Streptomyces griseus mitochondrial toxin, 4767

Streptomyces lividans carbon utilization, 4217 xlnB promoter, 4217 Streptomyces scabies

thaxtomin A production, 4313

Streptomyces spp.

enzymatic activation of glucose, 3972 α-ionone hydroxylation, 3878 mercury resistance plasmids, 3383

Streptomyces thermoviolaceus novel β-N-acetylglucosaminidase, 2920 Streptomycetes

streptomycin biosynthesis, 5061 Streptomycin biosynthesis genes soil streptomycetes, 5061 Stressed microorganisms

A. bisporus and NaCl, 4689
E. faecalis in an oligotrophic microcosm,

hot spring *Synechococcus* sp., 3893 *L. lactis* CitP induction, 850 *S. cerevisiae* viability, 779 ultrasound with microbubbles, 3927

ultrasound with microbubbles, 3927 V. cholerae O1, 3648 VTEC detection in ground beef, 1640

Structural and functional dynamics sulfate reducers in biofilms, 3731

Structure-function analysis nitrifying bioreactor, 3480 Styrene degradation

Pseudomonas sp., 2032 (S)-Styrene oxide production styrene degradation genes, 2032 Subfossil DNA

purple sulfur bacteria, 4513

Substrate selectivity
4-hydroxy-2-keto-pentanoic acid aldolase,
4093

Substrate specificity glucose-tolerant β-glucosidase, 3607 muconate cycloisomerases, 3290

Substrate usage biomarker, 4202

Substrate utilization patterns BIOLOG GN method, 1220 rhizosphere bacteria, 4950

Substrates

NADP-isocitrate dehydrogenase, 4958 Subtractive hybridization

habitat-based oligonucleotide probes, 185 Subtropical estuaries

lysogenic bacterium abundance, 2308

amine fluoride effect on *S. sanguis*, 3503 trehalose production, 4346 Sucrose medium

L. mesenteroides dextransucrase, 1298 Sugar beets

antifungal P. fluorescens, 3563 gene transfer to bacteria, 1550

Suicide response S. typhimurium, 1323

Sulfate-reducing bacteria acetate oxidation kinetics, 2301 D. vulgaris, 53

detection by MPN method, 1700 enzymatic recovery of Pd⁰, 4607 insertion element ISD1, 53 rbo deletion mutagenesis, 2882 Solar Lake, 2943

structural, functional dynamics, 3731

Sulfate-reducing conditions hexadecan-2-one degradation, 1576 Sulfidogens

mercury methylation, 1987

Sulfonated azo compounds bacterial utilization, 2315 Sulfur disproportionation

D. sulfoexigens sp. nov., 119
Sulfur-oxidizing Thiomicrospira spp.
distribution in sediments, 4650

Sulfur-turf microbial mats novel thermophiles, 1680

Surface properties

Bacillus spores, 1123

C. parvum oocytes, 4439
human bifidobacteria, 21

Survival

C. parvum oocysts, 1070 Campylobacter spp. in water, 733 E. coli in drinking water, 197 E. coli O157:H7 in manure, 3166

E. faecalis in an oligotrophic microcosm,
4238

enteric pathogens on food, 3883 individual AM fungus symbionts, 3473 PAH degraders introduced into soil, 359 Pseudomonas strains and solvent shock, 38 Symbiosis

AM fungi and plant roots, 3473 cyanobacteria in lichens, 310 hydrothermal vent mussels and bacteria,

insects and bacteria, 3599 leaf-cutting ants and fungus, 4820 nematodes and bacteria, 3214

squid and luminous bacteria, 805, 3209 Thiothrix spp. and echinoderms, 3491

Synechococcus spp. growth on urea, 2361 growth rate and rRNA content, 3346 photosynthesis and stress, 3893 UV-A and nanoflagellate grazing, 287 Synthetic promoters

modulation of strength, 82 Syntrophic acetate oxidation G. sulfurreducens, 2232 Syringate

O demethylation, 836 SYTOX green stain

bacterial viability, 2697 Tannin-tolerant bacteria

characterization, 3824

E. coli O157:H7 detection, 3389 Taxonomy

Xenorhabdus, Photorhabdus nematode hosts, 4246

Teat seals mastitis pathogen inhibition, 2287 Tellurite resistance Pseudomonas spp., 4040

Temperate forest soil atmospheric isoprene consumption, 172

Temperate phage-host systems Mamala Bay, Oahu, Hawaii, 535

Temperature

xxxvi

amoebae in hospital water, 1822 aquatic hyphomycete sporulation, 1522 baculovirus replication, 2237 C. jejuni at low temperatures, 3917

coral bleaching, 1379

E. coli growth modeling, 1773 effects on C. coli, 581 insect cell growth, 2237

lethality of ultrasound, 465 PCB degradation, 4823

stressed Synechococcus sp., 3893 Thermococcus compatible solute accumu-

lation, 3591 Temperature gradient gel electrophoresis 16S rRNA quantification, 4581

human fecal bacteria, 3854 Template-to-product ratios multitemplate PCR, 3724

1,2,3,4-Tetrachlorobenzene biodegradation, 3798

2,3,5,6-Tetrachlorobiphenyl microbial dechlorination, 2966 ortho dechlorination, 3359

Tetrachloroethene reductive dechlorination, 1270

Tetragenococcus halophila xyl operon, 2513

Tetrahymena pyriformis

B. thuringiensis growth, 1750 Tetrahymena spp.

grazing on attached bacteria, 1264 tftC and tftD

2,4,5-T metabolism, 2086 Thalassia testudinum

antibiotic metabolite, 1490 Thaxtomin A

microbial utilization, 4313 Thermal inactivation

S. enteritidis, 459 viable microorganisms in food, 1157

Thermal resistance B. subtilis spores, 4109

Thermal tolerance M. paratuberculosis, 999

Thermococcus spp. compatible solutes, 3591

Thermocrinis ruber gen. nov., sp. nov. pink filament former, 3576

Thermomonospera fusca polyester degradation, 1731 Thermomyces lanuginosus

phytase gene, 4423 Thermophiles

bioleaching control system, 4555 copolyester degradation, 1731 heat shock response, 3063 reduction of soluble iron, 2181 sulfur-turf microbial mats, 1680

Thermostable enzymes acid phosphatases from molds, 4446 α-L-arabinofuranosidase, 216 B. stearothermophilus, 4428 Bacillus alkaline xylanases, 3533 Bacillus endochitinases, 3397

cellulases from T. neapolitana, 4774 DNA amplification mediation, 3748

DNA polymerases, 3748

glutamate dehydrogenase, 2152 homotetrameric xylose isomerase, 2357

β-mannanase, 4428 P. islandicum, 2152

PspGI from a Pyrococcus sp., 3669 S. lividans xylanase, 4217 Thermus B-galactosidase, 2187

Thermotoga neapolitana

homotetrameric xylose isomerase, 2357 thermostable cellulases, 4774

Thermotolerance

L. monocytogenes morphology, 2065

Thermus spp. β-galactosidase gene, 2187

Thermus thermophilus proline-producing mutant, 4328

Thiobacilli

attachment to pyrite, 2937

Thiobacillus ferrooxidans bioleaching, 2743

phosphate starvation monitoring, 4990 zinc sulfide leaching, 3570

Thiobacillus spp.

metal extraction from ash, 1237

Thiols

methionine conversion, 3320

Thiomicrospira spp.

comparison of isolates, 4057 distribution in sediments, 4650

Thiosulfate disproportionation D. sulfoexigens sp. nov., 119

Thiothrix spp.

symbiosis with echinoderms, 3491

Thiotrophic bacteria hydrothermal vent mussels, 370

Threonine aldolase A. gossypii, 4283 Pseudomonas sp., 549

Ticks

failure to inherit B. afzelii, 3089 mouse susceptibility to Borrelia, 4596

Time-to-toxicity C. botulinum, 4416

Tissue plasminogen activator expression in E. coli, 4891

Tobacco plants

phytoplasma antibody production, 4566

Tobamoviruses

detection in forest soil, 1430 seasonal pattern in red spruce, 1436

tod operon induction P. putida, 5049

tod-luxCDABE BTEX sensing, 2730

TOL plasmids

establishment in biofilms, 2247

Toluene anaerobic metabolism, 1650 bacterial biosensor, 1006

biodegradation, 1715 biotransformation, 748 metabolism in soil, 4924

Toluene ortho-monooxygenase TCE rhizoremediation, 112

Toluene-degrading bacteria effect of TCE on competition, 208 survival after solvent shock, 38

Toluene/o-xylene monooxygenase

P. stutzeri, 3023, 3626 Tomato mosaic tobamoviruses

infection of red spruce trees, 1436 Toxic chemicals

identification, quantification, 4346

Toxic cyanobacteria detection, 34 quantification, 2639

Toxicity endophytic fungi, 601

metals and PAH biodegradation, 4610

B. sphaericus, 756 M. echinata, 3620 S. chartarum, 3620

Toxoplasma gondii

oocyst detection in water, 2278

Trametes versicolor

triiodinated benzoate transformation, 3114

Transcription factor PACC

penicillin biosynthesis, 843 Transcriptional activation gpdA promoter, 2229

Transcriptional regulation A. nidulans xlnD gene, 1412

Transcripts of cellobiohydrolase genes

P. chrysosporium, 1924 Transduction

marine gene transfer, 2780 Transformation

diatrizoate, 3114

3,5-dichloro-p-anisyl alcohol, 3225

industrial dyes, 2788

6-nitrochrysene, 3106 TNT, 2200

toluene, 748

triiodinated benzoates, 3114

Transgenic plants

DNA transfer to bacteria, 1550 Transient gene expression

green fluorescent protein for study, 2240 Transition metal ions

oral streptococcus killing, 27

Translation errors

recombinant human hemoglobin, 1589

Transmission electron microscopy cell dry mass determination, 688

Transport mechanisms acetic acid in S. cerevisiae, 665

C. beijerinckii and glucitol, 1612 S. aureus and amino acids, 763 viruses in sandy soils, 405

Transposable partitioning locus Sinorhizobium strain, 1657

Transposition ISD1 in D. vulgaris, 53

Transposon mutagenesis H. influenzae, 4697

Transposons

structure and distribution, 1940 Trehalose metabolism interplay with Hsp104, 4614

Trehalose synthase G. frondosa, 4340

TRI11

F. sporotrichioides, 221

Triaminotoluene TNT transformation, 2200 Trichlorobenzenes dechlorination, 496 Trichloroethene

oxidization by Pseudomonas strains, 2454

Trichloroethylene biodegradation, 1106, 3451, 4353 effect on toluene degraders, 208 oxidation by *P. stutzeri*, 3023 rhizoremediation, 112 tod operon induction, 5049 2,4,5-Trichlorophenoxyacetic acid

metabolism by B. cepacia, 2086 Trichoderma harzianum

glucanolytic system, 1442 metabolite effects, 5053 Trichoderma reesei

endoglucanase gene, 555 exo-β-D-glucosaminidase, 890 secretory protein maturation, 3202 Trichoderma spp.

mushroom-growing facilities, 133 *Trichodesmium* spp. nitrogenase localization, 3052

Trichosporon mucoides
dibenzofuran degradation, 2215

Trichothecene mycotoxins biosynthesis, 221 pulmonary hemosiderosis, 3620

Trickle-bed bioreactor start-up bacterial community dynamics, 930

Trifolitoxin production

R. etli competitiveness, 2630

Sinorhizobium strain, 1657

Triiodinated benzoates

fungal transformation, 3114 2,4,6-Trinitrotoluene

aerobic degradation, 2864 biotransformation, 2200 reductive metabolism, 246 Triton X-100

enhanced sFV/TNF-α secretion, 2869 tRNA^{Leu} intron sequence variation lichen cyanobiont diversity, 310

Tropheryma whippelii
environmental occurrence, 760

Trout farms
C. botulinum, 4161
Trout growth hormone

expression by K. lactis, 2403 Tungsten effect on P. aerophilum, 3004

Turf grass disease disease-suppressive compost, 4015 tutD and tutE

anaerobic toluene metabolism, 1650 Two-peptide bacteriocins L. plantarum, 2269

UDP-4-keto-6-deoxyglucose enzymatic glucose conversion, 3972

Ultradian growth

Prochlorococcus spp., 1066
Ultramicrobacteria

glucose catabolism, 4830 ribosome content, 4433 rRNA operon copy number, 4433

rRNA operon copy number, 4433 Ultraplankton plastid SSU rRNA genes phylogenetic diversity, 294 Ultrasound

Ultrasound bacterial stress responses, 3927 lethality, 465 Uncultivated prokaryotes 16S rRNA quantification, 4581 detection in grassland soils, 4588 sulfur-turf microbial mats, 1680

Unicellular cyanobacteria EPS production, 1130

Upflow anaerobic sludge blanket reactors carbon tetrachloride degradation, 2350 improved dechlorination, 1860

Uptake mechanisms
choline in estuaries, 1045
E. coli and heavy metals, 4068
L. lactis and citrate, 850
L. pneumophila, 126
M. trichosporium and methane, 253
methanotrophs and methane, 1143

Synechococcus growth, 2361 UV light

carotenoids protect *E. coli*, 1972 effects on nanoflagellate grazing, 287 *Synechococcus* photosynthesis, 3893

UV-irradiated pathogens cell viability indicator, 4264

Vaccines anthrax, 982

engineered FimH heterobinary adhesins, 1628

Vacuum-packed sliced cooked ham L. carnosum, 3313

Valinomycin
S. griseus, 4767

Vanadium-induced multidrug resistance E. cloacae, 4317 E. hermannii, 4317

Vancomycin-cefixime-cefsulodin blood agar shiga toxin-producing *E. coli*, 2449

Vancomycin-resistant enterococci raw minced meat, 1825 Vanillate

O demethylation, 836

Variable-chain-length alkanes biodegradation, 2578

desulfurization plasmid replicon, 4363 heterologous protein expression, 793

Rhodococcus-E. coli, 4363 Vegetable broth competitive growth modeling, 3159

Vegetative incompatibility C. parasitica, 2988 Verotoxigenic E. coli

detection in food, 1640, 4210 magnetic capture-hybridization PCR, 147

Verrucomicrobiales glucose catabolism, 4830 Verticillium dahliae

microslerotia in soil, 3846 Viability

C. parvum oocysts (Letter), 3544 L. pneumophila in amoebae, 279 mRNA detection as indicator, 1313 nucleic acid-based detection assays, 4264

S. cerevisiae and acid stress, 779 SYTOX green stain, 2697

Viability staining complement-mediated killing, 515

Viable but nonculturable state enteric bacteria in water, 1736 V. vulnificus, 3025 Vibrio alginolyticus

pathogenicity for sea bream, 4269 Vibrio anguillarum

40-kDa porin protein, 138 Vibrio cholerae O1 exopolysaccharide production, 3648

Vibrio fischeri association with squid, 805 Vibrio parahaemolyticus

detection in shrimp, 681 Vibrio spp.

chemotaxis towards fish mucus, 1573 coral bleaching, 1379 encapsulation by brine shrimp, 2318 grazing pressure, 1910

Vibrio vulnificus bacteriophages, 346 biotypes, 7 eel isolate heterogeneity, 4676 genetic relatedness of isolates, 3403 improved isolation method, 1721 RAPD analysis, 3025

selective growth medium, 2701 Vinyl chloride humic acids and oxidation, 3102

Viral lysis bacterioplankton production, 431

Virulence
S. enterica serovar Enteritidis, 2166

Virulence plasmids Y. enterocolitica, 1812

Viruses detection in mussels, 3118 detection in shellfish, 858, 3376 hepatitis E virus from sewage, 4485 treated wastewater, 4307

Visible light

Synechococcus photosynthesis, 3893

Vital staining

S. cerevisiae detection, 1139

Vitreoscilla stercoraria hemoglobin synthesis, 2220 Vittaforma corneae confirmation in water, 3332

Volatile organic compounds microbes in building materials, 2914

Wadden Sea sediments microbial community composition, 2691 Waste gas treatment bacterial community dynamics, 930

Wastewater
Acinetobacter antibiotic resistance, 3499
ammonium removal, 4500
B. fragilis bacteriophages, 4307
bacteriophages, 5027
C. cayetanensis detection, 2284
infectious enteroviruses, 4307

nitrate removal, 5016 nitrifier community structure, 3584 phosphate removal, 992 somatic coliphages, 4307

Water

C. parvum oocyst capture, 4495 death of enteric bacteria, 1736 microsporidia, 3332 N. fowleri recovery, 955 oocyst and cyst detection, 1743 oocyst and cyst sedimentation, 4460 Water activity

E. coli growth modeling, 1773 L. lactis lactose metabolism, 2111

Water blooms quantification of cyanobacteria, 2639

Water quality monitoring Colilert versus Enterolert, 3079 Water temperature

V. vulnificus in oysters, 1459 Watermark disease of willows PCR-based detection, 3966

Weissella spp. silage fermentation, 2982 Wetlands

acidophilic methanotrophs, 922 bacterial CO oxidation, 4939

Wheat fungal detoxification of antifungal metabolites, 2386

Wheat rhizosphere cryptic gene-mobilizing plasmids, 880 EPS-producing *P. agglomerans*, 3740

Wheat straw degradation P. eryngii, 325

Whipple's disease bacterium environmental occurrence, 760

White rot fungi benzo[a]pyrene mineralization, 2853 3,4-dichloroaniline mineralization, 3305 laccase gene, 1766

PCB congener degradation, 2020 Willows watermark disease agent, 3966

Winemaking flavor development, 3607 homothallic strain hybrids, 5039 nitrogen repression, 3831 yeast sensu stricto hybrids, 3887 Wood

P. chrysosporium gene expression, 3536 P. chrysosporium mRNA transcripts, 1924 Wood-rotting fungi

chloromethane emission, 2831 laccases and peroxidases, 1601 Woody legumes of the Canary Islands

Bradyrhizobium strains, 2096

Xanthan lyase
Bacillus strain, 3765
Xanthan side chains

pyruvylated mannose liberation, 3765 Xanthobacter flavus

toxic effects of Fenton reactions, 3759 Xanthomonas fragariae strain relatedness, 3961

Xanthomonas oryzae pv. oryzae DNA modification systems, 1663 Xenorhabdus nematophilus

lecithinase properties, 2367 phase variation, 1188 Xenorhabdus spp.

Caribbean isolates, 4246 xlnB promoter

S. lividans, 4217 xlnD

A. nidulans, 1412
XinR
A. niger gene expression, 3615

xyl operon T. halophila, 2513 Xylanases

A. niger gene expression, 3615 S. lividans, 4217 S. rolfsii, 594

xynB from D. thermophilum, 1759

Xylene metabolism in soil, 4924

Xylose fermentation recombinant Saccharomyces yeast, 1852

D-Xylose—H⁺ symporter of *L. brevis* expression in *L. plantarum*, 4720 xylT

expression in *L. plantarum*, 4720 *xynB*

cloning from D. thermophilum, 1759

Yeasts

cellooligosaccharide assimilation, 4857 cholera toxin-induced signal, 564 dibenzofuran degradation, 2215 glutamine production, 2952 identification in food, 2207 industrial strain selection, 1669 isoamyl acetate production, 4076 nisin resistance, 4047 sensu stricto hybrids, 3887 trehalose metabolism, 4614 winemaking strain hybrids, 5039 Yersinia enterocolitica virulence plasmid retention, 1812

Zinc sulfide leaching T. ferrooxidans, 3570 Zoosporic fungi inhibition by sea grass, 1490

